

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:06:35 ; Search time 15 Seconds
(without alignments)

82,384 Million cell updates/sec

Title: US-09-580-018-42

Perfect-score: 217

Sequence: 1 DAEFRHDSGYEVHHQKLVFF.....DVGSNKGAIIGLMVGVVIA 42

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 2942292 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum March 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

1: /cgn2_6/prodata/1/iaa/5A-COMB.pep.*

2: /cgn2_6/prodata/1/iaa/5B-COMB.pep.*

3: /cgn2_6/prodata/1/iaa/6A-COMB.pep.*

4: /cgn2_6/prodata/1/iaa/6B-COMB.pep.*

5: /cgn2_6/prodata/1/iaa/PCFUS-COMB.pep.*

6: /cgn2_6/prodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	217	100.0	42	1 US-07-744-767A-2	Sequence 2, Appli
2	217	100.0	42	1 US-08-179-574-1	Sequence 1, Appli
3	217	100.0	42	1 US-08-347-144-1	Sequence 1, Appli
4	217	100.0	42	1 US-08-462-859A-19	Sequence 19, Appl
5	217	100.0	42	1 US-08-123-659A-19	Sequence 19, Appl
6	217	100.0	42	1 US-08-464-247A-19	Sequence 19, Appl
7	217	100.0	42	1 US-08-464-248A-19	Sequence 19, Appl
8	217	100.0	42	1 US-08-476-464A-1	Sequence 1, Appli
9	217	100.0	42	1 US-08-304-585-2	Sequence 2, Appli
10	217	100.0	42	1 US-08-302-808-5	Sequence 5, Appli
11	217	100.0	42	1 US-08-268-348A-1	Sequence 5, Appli
12	217	100.0	42	2 US-08-433-734-2	Sequence 2, Appli
13	217	100.0	42	2 US-08-603-030-9	Sequence 9, Appli
14	217	100.0	42	2 US-07-737-371E-72	Sequence 72, Appli
15	217	100.0	42	2 US-08-422-333-4	Sequence 4, Appli
16	217	100.0	42	2 US-08-682-245A-4	Sequence 4, Appli
17	217	100.0	42	2 US-08-986-948-5	Sequence 5, Appli
18	217	100.0	42	3 US-08-717-551A-2	Sequence 5, Appli
19	217	100.0	42	4 US-09-388-890-1	Sequence 1, Appli
20	217	100.0	42	4 US-09-005-215-20	Sequence 20, Appl
21	217	100.0	42	4 US-09-242-724-23	Sequence 23, Appl
22	217	100.0	42	4 US-08-922-930-2	Sequence 2, Appli
23	217	100.0	42	5 PCT-US92-06700-2	Sequence 2, Appli
24	217	100.0	42	5 PCT-US93-00325-1	Sequence 1, Appli
25	217	100.0	43	1 US-08-235-400-1	Sequence 1, Appli
26	217	100.0	43	1 US-08-437-067-1	Sequence 1, Appli
27	217	100.0	43	1 US-08-302-808-6	Sequence 6, Appli

28	217	100.0	43	1 US-08-079-511-1	Sequence 1, Appli
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31	217	100.0	43	2 US-08-602-264A-3	Sequence 3, Appli
32	217	100.0	43	2 US-08-469-362-1	Sequence 1, Appli
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37	217	100.0	43	2 US-08-986-948-6	Sequence 6, Appli
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43	217	100.0	43	3 US-08-976-179-1	Sequence 1, Appli
44	217	100.0	43	4 US-09-216-958-3	Sequence 3, Appli
45	217	100.0	43	4 US-09-356-931-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-07-744-767A-2
; Sequence 2, Application US/07744767A
; Patent No. 5434050
; GENERAL INFORMATION:
; APPLICANT: Maggio, John E.
; APPLICANT: Mantyh, Patrick W. -Amyloid Peptide and Methods
; TITLE OF INVENTION: Labelled
; TITLE OF INVENTION: for Use in Detecting Alzheimer's Disease
; NUMBER OF SEQUENCES: 3
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner, P.A.
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07744,767A
; FILING DATE: 13-AUG-1991
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 600,226-US-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-07-744-767A-2

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEADVGSNKGAIIGLMVGVVIA 42

Db 1 DAEFRHDSGYEVHHQKLVFFAEADVGSNKGAIIGLMVGVVIA 42

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Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 5
US-08-123-659A-19
; Sequence 19, Application US/08123659A
; Patent No. 5656477
; GENERAL INFORMATION:
; APPLICANT: Jacobsen, J. S.
; TITLE OF INVENTION: Vitek, M. P.
; TITLE OF INVENTION: No. 5656477el Amyloid Precursor and Method of
; REFERENCE/DOCKET NUMBER: 31,844-01
; TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Anne Rosenblum
; STREET: 163 Delaware Avenue, Suite 212
; CITY: Delmar
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 12054
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/123,659A
; FILING DATE: 20-SEP-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Rosenblum, Anne M.
; REGISTRATION NUMBER: 30,419
; REFERENCE/DOCKET NUMBER: 31,844-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (518)475-0611
; TELEFAX: (518)475-0619
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-123-659A-19

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 6
US-08-464-247A-19
; Sequence 19, Application US/08464247A
; Patent No. 5693478
; GENERAL INFORMATION:
; APPLICANT: Jacobsen, J. S.
; TITLE OF INVENTION: Vitek, M. P.
; TITLE OF INVENTION: No. 5693478el Amyloid Precursor and Method of
; REFERENCE/DOCKET NUMBER: 31,844-02
; TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: American Cyanamid Company
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STREET: One Campus Drive
CITY: Parsippany
STATE: New Jersey
COUNTRY: United States
ZIP: 07054
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/464,247A
FILING DATE: 05-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Barnhard, Elizabeth M.
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,844-03
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-683-2158
TELEFAX: 201-683-4117
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-464-247A-19

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 7
US-08-464-248A-19
; Sequence 19, Application US/08464248A
; Patent No. 5703209
; GENERAL INFORMATION:
; APPLICANT: Jacobsen, J. S.
; TITLE OF INVENTION: Vitek, M. P.
; TITLE OF INVENTION: No. 5703209el Amyloid Precursor and Method of
; REFERENCE/DOCKET NUMBER: 31,844-02
; TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: American Cyanamid Company
; STREET: One Cyanamid Plaza
; CITY: Wayne
; STATE: New Jersey
; COUNTRY: United States
; ZIP: 07470-8426
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/464,248A
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Barnhard, Elizabeth M.
; REGISTRATION NUMBER: 31,088
; REFERENCE/DOCKET NUMBER: 31,844-02
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (201)831-3246
; TELEFAX: (201)831-3305
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; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS: 1
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-464-248A-19

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42
|||||
Db 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42

RESULT 8

US-08-476-464A-1
; Sequence 1, Application US/08476464A
; Patent No. 5707821

; GENERAL INFORMATION:
; APPLICANT: RYDEL, RUSSELL E.
; APPLICANT: DAPERN, MICHAEL S.
; TITLE OF INVENTION: THERAPEUTIC INHIBITION OF PHOSPHOLIPASE
; TITLE OF INVENTION: A2 IN A-BETA PEPTIDE-MEDIATED NEURODEGENERATIVE DISEASE
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND & TOWNSEND & CREW LLP
; STREET: TWO EMBARCADERO CENTER, 8TH FLOOR
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: U.S.A.
; ZIP: 94111-3834

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/476,464A
; FILING DATE: 07-JUN-1995

; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: STORELLA, JOHN R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 15270-002300
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-476-464A-1

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42
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Db 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42

RESULT 9

US-08-304-585-2
; Sequence 2, Application US/08304585
; Patent No. 5721106

; GENERAL INFORMATION:
; APPLICANT: Magglo, John E.
; APPLICANT: MATHY, PATRICK W.
; TITLE OF INVENTION: LABELLED BETA-AMYLOID PEPTIDE AND
; TITLE OF INVENTION: METHODS FOR USE IN DETECTING ALZHEIMER'S DISEASE
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Mueeting, Raasch, Gebhardt & Schwappach, P.A.
; STREET: P.O. Box 581415
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55458-1415

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/304,585
; FILING DATE: 12-SEP-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mueeting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 110,00010120
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-305-1217
; TELEFAX: 612-305-1228

; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS: not relevant
; TOPOLOGY: not relevant
; MOLECULE TYPE: peptide
; US-08-304-585-2

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42
|||||
Db 1 DAEFRHDSGYEVHOKLVFFAEVDGSGNKGAIIGLMVGGVVIA 42

RESULT 10

US-08-302-808-5
; Sequence 5, Application US/08302808
; Patent No. 5750349

; GENERAL INFORMATION:
; APPLICANT: SUZUKI, No. 5750349uhiro
; APPLICANT: ODARA, Asano
; APPLICANT: KITADA, Chieko
; TITLE OF INVENTION: ANTIBODIES TO B-AMYLOIDS OR THEIR
; TITLE OF INVENTION: DERIVATIVES AND USE THEREOF
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIXE, BRONSTEIN, ROBERTS & CUSHMAN
; STREET: 130 WATER STREET
; CITY: BOSTON
; STATE: MA
; COUNTRY: USA
; ZIP: 02019

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/302,808
; FILING DATE: 15-SEP-1994

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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP94/00089
FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 019035/1993
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 286985/1993
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 334773/1993
FILING DATE: 28-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 44631
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEFAX: 617-523-6440
TELEX: 200291 STRE
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
US-08-302-808-5

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 11
US-08-268-348A-1
Sequence 1, Application US/08268348A
Patent No. 5750374
GENERAL INFORMATION:
APPLICANT: Dobeli, Heinz
APPLICANT: Draeger, Nicholas
APPLICANT: Trotman, Gerda H
APPLICANT: Jakob, Peter
APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: Process for Producing Hydrophobic
TITLE OF INVENTION: Polypeptides and Proteins, and Fusion Proteins for Use in
TITLE OF INVENTION: Producing Same
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSER: Hoffmann-La Roche Inc.
STREET: 340 Kingsland Street
CITY: Nutley
STATE: New Jersey
COUNTRY: U.S.A.
ZIP: 07110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/268,348A
FILING DATE: 29-JUN-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
```

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APPLICATION NUMBER: EP 93110755.1
FILING DATE: 06-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Parise, John P.
REGISTRATION NUMBER: 34,403
REFERENCE/DOCKET NUMBER: 4105/157
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 235-6326
TELEFAX: (201) 235-3500
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: N-terminal
US-08-268-348A-1

Query Match 100.0%; Score 217; DB 1; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 12
US-08-433-734-2
Sequence 2, Application US/08433734
Patent No. 5837473
GENERAL INFORMATION:
APPLICANT: Maggio, John E.
APPLICANT: Mantyn, Patrick W.
TITLE OF INVENTION: Labelled
TITLE OF INVENTION: for Use in Detecting Alzheimer's Disease
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSER: Muetting, Raasch, Gebhardt & Schwappach, P.A.
STREET: P.O. Box 581415
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55458-1415
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,734
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Muetting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 110,00010102
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1220
TELEFAX: 612-305-1228
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-433-734-2

Query Match 100.0%; Score 217; DB 2; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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RESULT 13
US-08-609-090-9
; Sequence 9, Application US/08609090
; Patent No. 5840838
; GENERAL INFORMATION:
; APPLICANT: HENSLEY, Kenneth
; APPLICANT: BUTTERFIELD, D. A.
; APPLICANT: CARNEY, John M.
; APPLICANT: ARSENOV, Michael
; TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF
; TITLE OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LOWE PRICE LEBLANC & BECKER
; STREET: 99 Canal Center Plaza, Suite 300
; CITY: Alexandria
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/609,090
; FILING DATE: 29-FEB-1996
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Kraus, Eric J.
; REGISTRATION NUMBER: 36,190
; REFERENCE/DOCKET NUMBER: 434-059
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-684-1111
; TELEFAX: 703-684-1124
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-609-090-9
Query Match 100.0%; Score 217; DB 2; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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RESULT 14
US-07-737-371E-72
; Sequence 72, Application US/07737371E
; Patent No. 5876948
; GENERAL INFORMATION:
; APPLICANT: Yankner, Bruce A.
; TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY
; TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804

COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/737,371E
; FILING DATE: 29-JUL-1991
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/559,172
; FILING DATE: 27-JUL-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Freeman, John W.
; REGISTRATION NUMBER: 29,066
; REFERENCE/DOCKET NUMBER: 00108/028002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 72:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-737-371E-72
Query Match 100.0%; Score 217; DB 2; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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RESULT 15
US-08-422-333-4
; Sequence 4, Application US/08422333
; Patent No. 5912410
; GENERAL INFORMATION:
; APPLICANT: CORDELL, Barbara L.
; TITLE OF INVENTION: TRANSGENIC NON-HUMAN MAMMAL DISPLAYING
; TITLE OF INVENTION: THE AMYLOID-FORMING PATHOLOGY OF ALZHEIMER'S DISEASE
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Scios, Inc.
; STREET: 2450 Bayshore Parkway
; CITY: Mountain View
; STATE: CA
; COUNTRY: USA
; ZIP: 94043
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/422,333
; FILING DATE: 13-APR-1995
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Shearer, Peter R.
; REGISTRATION NUMBER: 28,117
; REFERENCE/DOCKET NUMBER: 21900-28048.00
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 966-1550
; TELEFAX: (415) 968-2438
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid

; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-422-333-4

Query Match 100.0%; Score 217; DB 2; Length 42;
Best Local Similarity 100.0%; Pred. No. 4e-26;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
|||

Search completed: April 21, 2003, 12:08:07
Job time : 16 secs

GenCore version 5.1.4 p5 4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:06:50 ; Search time 15 Seconds

(without alignments)
211.719 Million cell updates/sec

Title: US-09-580-018-42

Perfect score: 217

Sequence: 1 DAEFRHDSGEVHHQKLVFF.....DVGNSKGAIGLMVGGVIA 42

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 288829 seqs, 7561385 residues

Total number of hits satisfying chosen parameters: 288829

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*
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2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB pep.*
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13: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB pep.*
14: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	217	100.0	42	9	US-10-051-496-2
3	217	100.0	42	9	US-10-082-804-7
4	217	100.0	42	9	US-09-962-955C-37
5	217	100.0	42	9	US-09-848-616-174
6	217	100.0	42	9	US-09-865-294-65
7	217	100.0	42	10	US-09-867-847-1
8	217	100.0	42	10	US-09-956-625-26
9	217	100.0	42	10	US-09-731-460-1
10	217	100.0	43	9	US-10-076-708-7
11	217	100.0	43	9	US-10-051-496-1
12	217	100.0	43	9	US-10-217-459-1
13	217	100.0	43	10	US-09-280-966-1
14	217	100.0	43	10	US-09-904-987-1
15	217	100.0	43	10	US-09-808-037-3
16	217	100.0	43	10	US-09-866-712-3
17	217	100.0	43	10	US-09-972-475-1
18	217	100.0	43	10	US-09-992-600-1
19	217	100.0	43	10	US-09-895-443-1

20	217	100.0	43	10	US-09-996-357-1	Sequence 1, Appli
21	217	100.0	43	10	US-09-992-994-1	Sequence 1, Appli
22	217	100.0	43	10	US-09-984-834-1	Sequence 1, Appli
23	217	100.0	43	12	US-10-041-605-1	Sequence 1, Appli
24	217	100.0	53	10	US-09-797-543-5	Sequence 5, Appli
25	217	100.0	53	12	US-10-016-717-1	Sequence 1, Appli
26	217	100.0	70	10	US-09-155-076-14	Sequence 14, Appli
27	217	100.0	82	9	US-09-848-616-173	Sequence 173, App
28	217	100.0	99	9	US-10-183-119-2	Sequence 2, Appli
29	217	100.0	100	10	US-09-794-375-4	Sequence 4, Appli
30	217	100.0	103	10	US-09-972-475-2	Sequence 2, Appli
31	217	100.0	103	10	US-09-895-443-2	Sequence 2, Appli
32	217	100.0	117	9	US-09-422-569-10	Sequence 10, Appli
33	217	100.0	117	10	US-09-794-375-6	Sequence 6, Appli
34	217	100.0	117	10	US-09-823-153-2	Sequence 2, Appli
35	217	100.0	355	10	US-09-794-975-13	Sequence 13, Appli
36	217	100.0	695	10	US-09-794-927-10	Sequence 10, Appli
37	217	100.0	695	10	US-09-794-927-12	Sequence 12, Appli
38	217	100.0	695	10	US-09-794-927-14	Sequence 14, Appli
39	217	100.0	695	10	US-09-795-847-10	Sequence 10, Appli
40	217	100.0	695	10	US-09-795-847-12	Sequence 12, Appli
41	217	100.0	695	10	US-09-795-847-14	Sequence 14, Appli
42	217	100.0	695	10	US-09-794-743-10	Sequence 10, Appli
43	217	100.0	695	10	US-09-794-743-12	Sequence 12, Appli
44	217	100.0	695	10	US-09-794-743-14	Sequence 14, Appli
45	217	100.0	695	10	US-09-794-748-10	Sequence 10, Appli

ALIGNMENTS

RESULT 1
US-08-923-055-2
Sequence 2, Application US/08923055
Patent No. US20010016327A1
GENERAL INFORMATION:
APPLICANT: Dana Galian
TITLE OF INVENTION: Identification of Agents that Protect
TITLE OF INVENTION: Against Inflammatory Injury to Neurons
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz
ADDRESSEE: & No. US20010016327A1ris LLP
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS
SOFTWARE: WORDPERFECT for WINDOWS 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/923,055
FILING DATE: Sept-03-97
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Lori Y. Beardsell
REGISTRATION NUMBER: 34,293
REFERENCE/DOCKET NUMBER: BYLR-0038
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEFAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-923-055-2

Query Match 100.0%; Score 217; DB 8; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42

RESULT 2

US-10-051-496-2

; Sequence 2, Application US/10051496
 ; Publication No. US20020182660A1

GENERAL INFORMATION:

APPLICANT: Kei-Lai L. Fong

TITLE OF INVENTION: N- and C-Terminus Specific Immunoassays for
 Full Length Beta-Amyloid Peptide - Abeta (1-40), Abeta (1-39)
 Abeta (1-41), Abeta (1-42) and Abeta (1-43)

NUMBER OF SEQUENCES: 5

CORRESPONDENCE ADDRESS:

ADDRESSEE: Kei-Lai L. Fong

STREET: 1004 West 8th Avenue

CITY: King of Prussia

STATE: Pennsylvania

COUNTRY: USA

ZIP: 19406

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.50 inch, 1.44MB storage

COMPUTER: IBM PC Compatibles

OPERATING SYSTEM: Windows

SOFTWARE: MS No. US20020182660A1epad

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/051,496

FILING DATE: 18-Jan-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/784,854A

FILING DATE: 16-Feb-2001

APPLICATION NUMBER: 60/183,407

FILING DATE: 18-February-2000

ATTORNEY/AGENT INFORMATION:

NAME: Koenig, C. Frederick III

REGISTRATION NUMBER: 29,662

REFERENCE/DOCKET NUMBER: FBI-PT001.1

TELECOMMUNICATION INFORMATION:

TELEPHONE: (215) 568-6400

TELEFAX: (215) 568-6499

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 42 Amino Acid

TYPE: Amino Acid

TOPOLOGY: Linear

MOLECULE TYPE: Protein

FEATURE:

NAME/KEY: Signal Sequence

LOCATION: 1-42

IDENTIFICATION METHOD:

Similarity to other sequences, hydro-phobic

OTHER INFORMATION:

AUTHORS:

TITLE:

JOURNAL:

VOLUME:

ISSUE:

PAGES:

DATE:

RELEVANT RESIDUES IN SEQ ID NO: 2: FROM 1-42

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Query Match

100.0%; Score 217; DB 9; Length 42;
 US-10-051-496-2

Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42

RESULT 3

US-10-082-804-7

; Sequence 7, Application US/10082804

; Publication No. US20020194632A1

GENERAL INFORMATION:

APPLICANT: McConlogue, Lisa

APPLICANT: Gurney, Mark E.

TITLE OF INVENTION: Transgenic Knockouts of BACE-1

FILE REFERENCE: MEHB 02-329-A

CURRENT APPLICATION NUMBER: US/10/082,804

CURRENT FILING DATE: 2002-02-22

PRIOR APPLICATION NUMBER: 60/271,092

PRIOR FILING DATE: 2001-02-23

PRIOR APPLICATION NUMBER: 60/271,514

PRIOR FILING DATE: 2001-02-26

PRIOR APPLICATION NUMBER: 60/293,762

PRIOR FILING DATE: 2001-05-25

NUMBER OF SEQ ID NOS: 7

SOFTWARE: PatentIn version 3.1

SEQ ID NO 7

LENGTH: 42

TYPE: PRT

ORGANISM: Homo sapiens

FEATURE:

OTHER INFORMATION: A-beta 42 sequence.

US-10-082-804-7

Query Match

100.0%; Score 217; DB 9; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42

RESULT 4

US-09-962-955C-37

; Sequence 37, Application US/09962955C

; Publication No. US20030013648A1

GENERAL INFORMATION:

APPLICANT: Gerardo M. Castillo

APPLICANT: Alan D. Snow

NUMBER OF SEQUENCES: 37

CORRESPONDENCE ADDRESS:

ADDRESSEE: Patrick M. Dwyer

STREET: Proteotech, Inc, 1818 Westlake Avenue N, Suite 114

CITY: Seattle

STATE: WA (Washington)

COUNTRY: United States of America

ZIP: 98109

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette - 3.50 inch, 1.44 MB storage

COMPUTER: IBM PC

OPERATING SYSTEM: Windows 98

SOFTWARE: WordPerfect 9

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/962,955C

FILING DATE: 24-September-2001

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/938,275

FILING DATE: 22-August-2001

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Dwyer, Patrick M.
 REGISTRATION NUMBER: 32,411
 REFERENCE/DOCKET NUMBER: PROTEO.P03CI
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206) 343-7074
 TELEFAX: (206) 343-7085
 INFORMATION FOR SEQ ID NO: 37:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 42 AMINO ACIDS
 TYPE: AMINO ACID
 STRANDEDNESS:
 TOPOLOGY: LINEAR
 ORIGINAL SOURCE:
 ORGANISM: MOUSE
 FEATURE:
 OTHER INFORMATION: Also referred to in the specification as "AB 1-42"

US-09-962-955C-37

Query Match 100.0%; Score 217; DB 9; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 5

US-09-848-616-174

Sequence 174, Application US/09848616
 Publication No. US20030054010A1
 GENERAL INFORMATION:
 APPLICANT: Sebbel, Peter
 APPLICANT: Dunant, Nicolas
 APPLICANT: Bachmann, Martin
 APPLICANT: Tissot, Alain
 APPLICANT: Lechner, Franziska
 TITLE OF INVENTION: Molecular Antigen Array
 FILE REFERENCE: 1700.0180002
 CURRENT APPLICATION NUMBER: US/09/848,616
 CURRENT FILING DATE: 2001-05-05
 NUMBER OF SEQ ID NOS: 186
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 174
 LENGTH: 42
 TYPE: PRT
 ORGANISM: Unknown
 FEATURE:
 OTHER INFORMATION: Amyloid Beta Peptide

US-09-848-616-174

Query Match 100.0%; Score 217; DB 9; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 6

US-09-865-294-65

Sequence 65, Application US/09865294
 Publication No. US20030068325A1
 GENERAL INFORMATION:
 APPLICANT: Wang, Chang Yi
 TITLE OF INVENTION: Immunogenic peptide composition as vaccines for the
 TITLE OF INVENTION: prevention and treatment of Alzheimer's Disease
 FILE REFERENCE: 1151-4167
 CURRENT APPLICATION NUMBER: US/09/865,294
 CURRENT FILING DATE: 2001-05-25
 NUMBER OF SEQ ID NOS: 76
 SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 65
 LENGTH: 42
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-865-294-65

Query Match 100.0%; Score 217; DB 9; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 7

US-09-867-847-1

Sequence 1, Application US/09867847
 Patent No. US20020094335A1
 GENERAL INFORMATION:
 APPLICANT: Chalfour, Robert
 APPLICANT: Hebert, Lise
 APPLICANT: Kong, Xianqi
 APPLICANT: Gervais, Francine
 TITLE OF INVENTION: VACCINE FOR THE PREVENTION AND TREATMENT OF ALZHEIMER'S
 TITLE OF INVENTION: AND AMYLOID RELATED DISEASES
 FILE REFERENCE: 14445-501 CIP
 CURRENT APPLICATION NUMBER: US/09/867,847
 CURRENT FILING DATE: 2001-09-20
 PRIOR APPLICATION NUMBER: 60/168,594
 PRIOR FILING DATE: 1999-11-29
 PRIOR APPLICATION NUMBER: 09/724,842
 PRIOR FILING DATE: 2000-11-28
 NUMBER OF SEQ ID NOS: 65
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 1
 LENGTH: 42
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: All D peptides
 OTHER INFORMATION: or peptidomimetics

US-09-867-847-1

Query Match 100.0%; Score 217; DB 10; Length 42;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 8

US-09-956-625-26

Sequence 26, Application US/09956625
 Patent No. US20020119926A1
 GENERAL INFORMATION:
 APPLICANT: Fraser, Paul
 TITLE OF INVENTION: Inhibitors of IAPP Fibril Formation and Uses Thereof
 FILE REFERENCE: 14445-503
 CURRENT APPLICATION NUMBER: US/09/956,625
 CURRENT FILING DATE: 2001-09-19
 PRIOR APPLICATION NUMBER: 60/233,482
 PRIOR FILING DATE: 2000-09-19
 NUMBER OF SEQ ID NOS: 27
 SOFTWARE: Patentin Ver. 2.1
 SEQ ID NO 26
 LENGTH: 42
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-956-625-26

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Query Match      100.0%; Score 217; DB 10; Length 42;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||

RESULT 9
US-09-731-460-1
; Sequence 1, Application US/09731460
; Patent No. US20020137112A1
; GENERAL INFORMATION:
; APPLICANT: Chojkier, Mario
; APPLICANT: Buck, Martina
; TITLE OF INVENTION: Compositions and Methods for Diagnosing Alzheimer's
; FILE REFERENCE: CHOUKIER-04302
; CURRENT APPLICATION NUMBER: US/09/731.460
; CURRENT FILING DATE: 2000-12-07
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 42
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-731-460-1

Query Match      100.0%; Score 217; DB 10; Length 42;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||

RESULT 10
US-10-076-708-7
; Sequence 7, Application US/10076708
; Patent No. US20020164657A1
; GENERAL INFORMATION:
; APPLICANT: Sharma, Satish
; APPLICANT: Rank, Kenneth
; TITLE OF INVENTION: Assays for Accessing Aa-Tau Aggregation
; FILE REFERENCE: 6322
; CURRENT APPLICATION NUMBER: US/10/076, 708
; CURRENT FILING DATE: 2002-02-15
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 43
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-076-708-7

Query Match      100.0%; Score 217; DB 9; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.6e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||

RESULT 11
US-10-051-496-1
; Sequence 1, Application US/10051496
; Publication No. US20020182660A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Kei-Lai L. Fong
; TITLE OF INVENTION: N- and C-Terminus Specific Immunoassays for
; Full Length Beta-Amyloid Peptide - Abeta(1-40), Abeta(1-39),
; Abeta(1-41), Abeta(1-42) and Abeta(1-43)
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kei-Lai L. Fong
; STREET: 1004 West 8th Avenue
; CITY: King of Prussia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19406
; COMPUTER READABLE FORM: 3.50 inch, 1.44MB storage
; MEDIUM TYPE: IBM PC Compatibles
; OPERATING SYSTEM: Windows
; SOFTWARE: MS No. US20020182660A1epad
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/051,496
; FILING DATE: 18-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/784,854A
; FILING DATE: 16-Feb-2001
; APPLICATION NUMBER: 60/183,407
; FILING DATE: 18-February-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Koenig, C. Frederick III
; REGISTRATION NUMBER: 23,662
; REFERENCE/DOCKET NUMBER: FBI-PT001.1
; TELEPHONE: (215) 568-6400
; TELEFAX: (215) 568-6499
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 43 Amino Acid
; TYPE: Amino Acid
; STRANDEDNESS: <Unknown>
; TOPOLOGY: Linear
; MOLECULE TYPE: Protein
; HYPOTHETICAL: <Unknown>
; ANTI-SENSE: <Unknown>
; ORIGINAL SOURCE:
; ORGANISM: <Unknown>
; INDIVIDUAL ISOLATE: <Unknown>
; CELL TYPE: <Unknown>
; IMMEDIATE SOURCE:
; LIBRARY: <Unknown>
; CLONE: <Unknown>
; PUBLICATION INFORMATION:
; AUTHORS:
; TITLE:
; JOURNAL:
; VOLUME:
; ISSUE:
; PAGES:
; DATE:
; RELEVANT RESIDUES IN SEQ ID NO: 1:FROM 1 TO 43
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-051-496-1

Query Match      100.0%; Score 217; DB 9; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.6e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||
DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
    |||||

RESULT 12
US-10-217-459-1
; Sequence 1, Application US/10217459

```



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; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 43
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic peptide
US-09-808-037-3
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Query Match      100.0%; Score 217; DB 10; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.6e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
   |||||
Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
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Search completed: April 21, 2003, 12:08:28
Job time : 15 secs
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GenCore version 5.1.4.p5.4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:05:20 ; Search time 18 Seconds
(without alignments)
224.314 Million cell updates/sec

Title: US-09-580-018-42

Perfect score: 217
Sequence: 1 DAEFRHDSGYEVHHQKLVFF.....DVGSNKGAIIGLMVGGVVIA 42

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

PIR 73: *
1: Piri: *
2: Pir2: *
3: Pir3: *
4: Pir4: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	42	2 PN0512	beta-amyloid prote
2	217	100.0	57	2 E60045	Alzheimer's diseas
3	217	100.0	57	2 F60045	Alzheimer's diseas
4	217	100.0	57	2 G60045	Alzheimer's diseas
5	217	100.0	57	2 D60045	Alzheimer's diseas
6	217	100.0	57	2 A60045	Alzheimer's diseas
7	217	100.0	57	2 B60045	Alzheimer's diseas
8	217	100.0	82	2 PQ0438	Alzheimer's diseas
9	217	100.0	695	1 A49795	Alzheimer's diseas
10	217	100.0	770	1 QRHUA4	Alzheimer's diseas
11	198	91.2	695	2 A27485	Alzheimer's diseas
12	198	91.2	695	2 S00550	Alzheimer's diseas
13	198	91.2	747	2 JH0773	Alzheimer's diseas
14	133	61.3	33	2 S23094	Alzheimer's diseas
15	63	29.0	755	2 AI3228	beta-amyloid prote
16	62	28.6	755	1 QAQ4T	tryptophan 2-monoo
17	61	28.1	755	1 DAAGWT	tryptophan 2-monoo
18	57	26.3	337	2 S11435	genome polyprotein
19	57	26.3	503	2 S73843	general amino acid
20	56.5	26.0	378	2 S61992	SLGI protein - yea
21	55.5	25.6	237	2 G69525	formylmethanofuran
22	55.5	25.6	678	2 G71526	3-methyl-2-oxobuta
23	55	25.3	291	2 F95015	glycosyl transfera
24	55	25.3	317	2 H97888	glycosyl transfera
25	55	25.3	488	2 S27652	probable aldehyde
26	55	25.3	3083	2 JS0166	genome polyprotein
27	54.5	25.1	678	2 C81683	3-methyl-2-oxobuta
28	54.5	25.1	832	2 H84848	phospholipase D [i
29	54	24.9	77	2 C97027	feoA-like protein,

ALIGNMENTS

RESULT 1

PN0512

beta-amyloid protein - guinea pig (fragment)

C;Species: Cavia porcellus (guinea pig)

C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 17-Mar-1999

C;Accession: PN0512

R;Shimohigashi, Y.; Matsumoto, H.; Takano, Y.; Saito, R.; Iwata, T.; Kamiya, H.; Ohno, M

Biochem. Biophys. Res. Commun. 193, 624-630, 1993

A;Title: Receptor-mediated specific biological activity of a beta-amyloid protein fragment

A;Reference number: PN0512; MUID:93290653; PMID:7685598

A;Accession: PN0512

A;Molecule type: protein

A;Residues: 1-42 <SHI>

C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase ir

C;Keywords: alternative splicing; amyloid

Query Match 100.0%; Score 217; DB 2; Length 42;

Best Local Similarity 100.0%; Pred. No. 7.5e-22;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 2

E60045

Alzheimer's disease amyloid beta/A4 protein precursor - sheep (fragment)

C;Species: Ovis sp. (sheep)

C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995

C;Accession: E60045

R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.

Brain Res. Mol. Brain Res. 10, 299-305, 1991

A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,

A;Reference number: A60045; MUID:92017079; PMID:1656157

A;Accession: E60045

A;Molecule type: mRNA

A;Residues: 1-57 <JOH>

A;Cross-references: EMBL:X56130

C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase ir

C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;

Best Local Similarity 100.0%; Pred. No. 1e-21;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 3

F60045
Alzheimer's disease amyloid beta/A4 protein precursor - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
C;Accession: F60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: F60045
A;Molecule type: mRNA
A;Residues: 1-57 <JOH>
A;Cross-references: EMBL:X56127; NID:g1895; PIDN:CAA39592.1; PID:g1896
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;
Best Local Similarity 100.0%; Pred. No. 1e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 4
G60045
Alzheimer's disease amyloid beta/A4 protein precursor - guinea pig (fragment)
C;Species: Cavia porcellus (guinea pig)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995
C;Accession: G60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: G60045
A;Molecule type: mRNA
A;Residues: 1-57 <JOH>
A;Cross-references: EMBL:X56126
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;
Best Local Similarity 100.0%; Pred. No. 1e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 5
D60045
Alzheimer's disease amyloid beta/A4 protein precursor - bovine (fragment)
C;Species: Bos primigenius taurus (cattle)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995
C;Accession: D60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: D60045
A;Molecule type: mRNA
A;Residues: 1-57 <JOH>
A;Cross-references: EMBL:X56124
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;
Best Local Similarity 100.0%; Pred. No. 1e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 6
A60045
Alzheimer's disease amyloid beta/A4 protein precursor - dog (fragment)
C;Species: Canis lupus familiaris (dog)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995
C;Accession: A60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: A60045
A;Molecule type: mRNA
A;Residues: 1-57 <JOH>
A;Cross-references: EMBL:X56125
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;
Best Local Similarity 100.0%; Pred. No. 1e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 7
B60045
Alzheimer's disease amyloid beta/A4 protein precursor - polar bear (fragment)
C;Species: Ursus maritimus (polar bear)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
C;Accession: B60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: B60045
A;Molecule type: mRNA
A;Residues: 1-57 <JOH>
A;Cross-references: EMBL:X56128; NID:g2165; PIDN:CAA39593.1; PID:g2166
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

Query Match 100.0%; Score 217; DB 2; Length 57;
Best Local Similarity 100.0%; Pred. No. 1e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
Db 6 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 47

RESULT 8
PQ0438
Alzheimer's disease amyloid A4 protein precursor - rabbit (fragment)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 30-Sep-1993 #sequence_revision 19-Oct-1995 #text_change 19-Oct-1995
C;Accession: PQ0438; C60045
R;Davidson, J.S.; West, R.L.; Kotikalapudi, P.; Maroun, L.E.
Biochem. Biophys. Res. Commun. 188, 905-911, 1992
A;Title: Sequence and methylation in the beta/A4 region of the rabbit amyloid precursor
A;Reference number: PQ0438; MUID:93075180; PMID:1445331
A;Accession: PQ0438
A;Molecule type: DNA
A;Residues: 1-82 <DAV>
A;Cross-references: GB:M83558; GB:M83657
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,

A:Reference number: A60045; MUID:92017079; PMID:1656157
A:Accession: C60045
A:Molecule type: mRNA
A:Residues: 12-68 <JOH>
A:Cross-references: EMBL:X56129
C:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Keywords: alternative splicing; Alzheimer's disease; amyloid; Down's syndrome

Query Match 100.0%; Score 217; DB 2; Length 82;
Best Local Similarity 100.0%; Pred. No. 1.6e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEHHQKLVFFAEDVGSNGKAIIGLMVGGVVIA 42
DB 17 DAEFRHDSGYEHHQKLVFFAEDVGSNGKAIIGLMVGGVVIA 58

RESULT 9
A49795
Alzheimer's disease amyloid beta protein precursor - crab-eating macaque
C:Species: Macaca fascicularis (crab-eating macaque)
C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C:Accession: A49795
R:Podlasky, M.B.; Toland, D.R.; Selkoe, D.J.
Am. J. Pathol. 138, 1423-1435, 1991
A:Title: Homology of the amyloid beta protein precursor in monkey and human supports a
A:Reference number: A49795; MUID:91273117; PMID:1905108
A:Accession: A49795
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-695 <POD>
A:Cross-references: GB:M58727; NID:G342062; PIDN:AAA36829.1; PID:G342063
C:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Keywords: alternative splicing

Query Match 100.0%; Score 217; DB 1; Length 695;
Best Local Similarity 100.0%; Pred. No. 1.6e-20;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEHHQKLVFFAEDVGSNGKAIIGLMVGGVVIA 42
DB 597 DAEFRHDSGYEHHQKLVFFAEDVGSNGKAIIGLMVGGVVIA 638

RESULT 10
Q8RUAA
Alzheimer's disease amyloid beta protein precursor [validated] - human
N:Alternate names: Alzheimer's disease amyloid A4 protein; coagulation factor X1a inhibi
N:Contains: amyloid beta protein long, plaque form; amyloid beta protein short, vascular
protein precursor splice form APP(770)
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1987 #sequence_revision 28-Jul-1995 #text_change 15-Sep-2000
C:Accession: S02260; S05194; A32277; A33260; A35486; I39452; I39451; I39453; I59562; A44
4668; A28583; A29302; A60805; J06121; A60355; A59011; A38384; S29076; S38252; S3
R:Leineweber, H.G.; Salbaum, J.M.; Multhaup, G.; Kang, J.; Bayney, R.M.; Unterbeck, A.; Bey
Nucleic Acids Res. 17, 517-522, 1989
A:Title: The preA4(695) precursor protein of Alzheimer's disease A4 amyloid is encoded b
A:Reference number: S02260; MUID:89128427; PMID:2783775
A:Accession: S02260
A:Molecule type: DNA
A:Residues: 1-288, 'V', 365-770 <LEM1>
A:Cross-references: EMBL:X13466
A:Note: alternative splice form APP (695)
R:Leineweber, H.G.
submitted to the EMBL Data Library, November 1988
A:Reference number: S05194
A:Accession: S05194
A:Molecule type: DNA
A:Residues: 1-14, 'VW', 17-288, 'V', 365-770 <LEM2>
A:Cross-references: EMBL:X13466; NID:G35598; PIDN:CAA31830.1; PID:G871360
A:Note: alternative splice form APP(695)
R:La Fauri, G.; Lahiri, D.K.; Salton, S.R.J.; Robakis, N.K.
Biochem Biophys Res Commun. 159, 297-304, 1989

A:Title: Characterization of the 5'-end region and the first two exons of the beta-prote
A:Reference number: A32277; MUID:89165870; PMID:2538123
A:Accession: A32277
A:Molecule type: DNA
A:Residues: 1-75 <LAT>
A:Cross-references: GB:M24546; GB:M24547; NID:G341202; PIDN:AAAC13654.1; PID:G516074
R:Johnstone, E.M.; Chaney, M.O.; Moore, R.E.; Ward, K.E.; Norris, F.H.; Little, S.P.
Biochem Biophys Res Commun. 163, 1248-1255, 1989
A:Title: Alzheimer's disease amyloid peptide is encoded by two exons and shows similarity
A:Reference number: A33260; MUID:89392030; PMID:2675837
A:Accession: A33260
A:Molecule type: DNA
A:Residues: 656-737 <JOH>
A:Cross-references: GB:M29270; NID:G178863; PIDN:AAA51768.1; PID:G178865
R:Prill, F.; Levy, E.; van Duinen, S.G.; Boté, G.T.A.M.; Luyendijk, W.; Frangione, B.
Biochem Biophys Res Commun. 170, 301-307, 1990
A:Title: Expression of a normal and variant Alzheimer's beta-protein gene in amyloid of
A:Reference number: A35486; MUID:90321244; PMID:2196878
A:Accession: A35486
A:Molecule type: DNA
A:Residues: 672-710 <PRE1>
A:Note: 693-Gln was found in DNA isolated from HCHWA-D patients
R:Yoshikai, S.I.; Sasaki, H.; Doh-ura, K.; Furuya, H.; Sakaki, Y.
Gene 87, 257-263, 1990
A:Title: Genomic organization of the human amyloid beta-protein precursor gene.
A:Reference number: I39451; MUID:90236318; PMID:2110105
A:Accession: I39451
A:Status: nucleic acid sequence not shown; translation not shown; translated from GB/EMBL
A:Molecule type: DNA
A:Residues: 1-770 <YOS1>
A:Cross-references: GB:M33112; NID:G178613; PIDN:AAB59502.1; PID:G178616
A:Accession: I39451
A:Status: nucleic acid sequence not shown; translation not shown; translated from GB/EMBL
A:Molecule type: DNA
A:Residues: 1-530, 'QMLMPVPAFWKVR', <YOS2>
A:Cross-references: GB:M34875; NID:G178608; PIDN:AAB59501.1; PID:G178615
R:Yoshikai, S.I.; Sasaki, H.; Doh-ura, K.; Furuya, H.; Sakaki, Y.
Gene 102, 291-292, 1991
A:Reference number: A59020; MUID:91340168; PMID:1908403
A:Contents: annotation; erratum
A:Note: revised physical map for reference I39451
R:Levy, E.; Carman, M.D.; Fernandez-Madrid, I.J.; Power, M.D.; Lieberburg, I.; van Duinen
Science 248, 1124-1126, 1990
A:Title: Mutation of the Alzheimer's disease amyloid gene in hereditary cerebral hemorrh
A:Reference number: I39453; MUID:90260663; PMID:2111584
A:Accession: I39453
A:Status: translated from GB/EMBL/PDBJ
A:Molecule type: DNA
A:Residues: 656-737 <LEV>
A:Cross-references: GB:M37896; NID:G178618; PIDN:AAA51727.1; PID:G178620
A:Note: a mutation with 693-Gln is presented
R:Murrell, J.; Farlow, M.; Ghetti, B.; Benson, M.D.
Science 254, 97-99, 1991
A:Title: A mutation in the amyloid precursor protein associated with hereditary Alzheimer
A:Reference number: I59562; MUID:92025553; PMID:1925564
A:Accession: I59562
A:Status: translated from GB/EMBL/PDBJ
A:Molecule type: DNA
A:Residues: 689-716, 'P', 718-737 <MUR>
A:Cross-references: GB:857665; NID:G236720; PIDN:AAB51999.1; PID:G236721
R:Kamino, K.; Orr, H.T.; Payami, H.; Wjeman, E.M.; Alonso, M.E.; Puist, S.M.; Anderson,
araki, S.B.; Korenberg, J.R.; Sharma, V.; Kukull, W.; Larson, E.; Heston, L.L.; Martin,
Am. J. Hum. Genet. 51, 998-1014, 1992
A:Title: Linkage and mutational analysis of familial Alzheimer disease kindreds for the
A:Reference number: A44017; MUID:93035397; PMID:1415269
A:Accession: A44017
A:Molecule type: DNA
A:Residues: 687-692, 'G', 694-718 <KAM1>
A:Cross-references: GB:845135; NID:G257377; PIDN:AAB23645.1; PID:G257378
A:Experimental source: familial Alzheimer disease family SB
A:Note: sequence extracted from NCBI backbone (NCBIP:115374)
A:Accession: B44017
A:Molecule type: DNA

A:Residues: 687-718 <KAN2>
A:Cross-references: GB:845136; NID:G257379; PIDN:AA823646.1; PID:G257380
A:Experimental source: familial Alzheimer disease family LIT
A:Note: sequence extracted from NCBI backbone (NCBIP:115376)
A:Note: this sequence has a silent mutation
R:Kang, J.; Lemaire, H.G.; Unterbeck, A.; Salbaum, J.M.; Masters, C.L.; Grzeschik, K.H.; Ntare 325, 733-736, 1987
A:Title: The precursor of Alzheimer's disease amyloid A4 protein resembles a cell-surface
A:Reference number: A03134; MUID:87144572; PMID:2881207
A:Accession: A03134
A:Molecule type: mRNA
A:Residues: 1-288, 'V', 365-770 <KAN>
A:Cross-references: GB:Y00264; NID:G28525; PIDN:CAA68374.1; PID:G28526
A:Note: alternative splice form APP(695)
R:Robakis, N.K.; Ramakrishna, N.; Wolfe, G.; Wisniewski, H.M.
Proc. Natl. Acad. Sci. U.S.A. 84, 4190-4194, 1987
A:Title: Molecular cloning and characterization of a cDNA encoding the cerebrovascular
A:Reference number: A29030; MUID:87231971; PMID:3035574
A:Accession: A29030
A:Molecule type: mRNA
A:Residues: 1-288, 'V', 365-770 <ROB>
A:Cross-references: GB:M16765; NID:G178539; PIDN:AAA51722.1; PID:G178540
A:Note: the authors translated the codon GAG for residue 647 as Arg
R:Goldgaber, D.; Lerman, M.I.; McBride, O.W.; Saffiotti, U.; Gajdusek, D.C.
Science 235, 877-880, 1987
A:Title: Characterization and chromosomal localization of a cDNA encoding brain amyloid
A:Reference number: A47584; MUID:87120328; PMID:3810169
A:Accession: A47584
A:Molecule type: mRNA
A:Residues: 674-756, 'S', 758-770 <COL>
A:Cross-references: GB:M15533; NID:G178706; PIDN:AAA5540.1; PID:G178707
A:Experimental source: brain
R:Tanzi, R.E.; Gusella, J.F.; Watkins, P.C.; Bruns, G.A.P.; St George-Hyslop, P.; Van Ke
Science 235, 880-884, 1987
A:Title: Amyloid beta protein gene: cDNA, mRNA distribution, and genetic linkage near th
A:Reference number: A47585; MUID:87120329; PMID:2949367
A:Accession: A47585
A:Molecule type: mRNA
A:Residues: 674-703 <TAN1>
A:Cross-references: GB:M15532; NID:G177957; PIDN:AA51564.1; PID:G177958
R:Dyck, T.; Weidemann, A.; Multhaup, G.; Salbaum, J.M.; Lemaire, H.G.; Kang, J.; Muelle
EMBO J. 7, 949-957, 1988
A:Title: Identification, transmembrane orientation and biogenesis of the amyloid A4 prec
A:Reference number: S02638; MUID:88296437; PMID:2900137
A:Accession: S02638
A:Molecule type: mRNA
A:Residues: 672-678 <BYR>
R:Tanzi, R.E.; McClatchey, A.I.; Lamperti, E.D.; Villa-Komaroff, L.; Gusella, J.F.; Neve
Nature 331, 528-530, 1988
A:Title: Protease inhibitor domain encoded by an amyloid protein precursor mRNA associat
A:Reference number: S00707; MUID:88122640; PMID:2893290
A:Accession: S00707
A:Molecule type: mRNA
A:Residues: 286-344, 'I', 365-366 <TAN2>
A:Cross-references: EMBL:X06982; NID:G28817; PIDN:CAA30042.1; PID:G929612
A:Experimental source: promyelocytic leukemia cell line HL60
A:Note: alternative splice form APP(751)
R:Porte, P.; Gonzalez-Dewhitt, P.; Schilling, J.; Miller, J.; Hsu, D.; Greenberg, B.; De
Nature 331, 525-527, 1988
A:Title: A new A4 amyloid mRNA contains a domain homologous to serine proteinase inhibi
A:Reference number: S00925; MUID:88122639; PMID:2893289
A:Accession: S00925
A:Molecule type: mRNA
A:Residues: 1-344, 'I', 365-770 <P02>
A:Cross-references: GB:X06989; EMBL:X00297; NID:G28720; PIDN:CAA30050.1; PID:G28721
A:Note: alternative splice form APP(751)
R:Kaguchi, N.; Takahashi, Y.; Tokushima, Y.; Shiojiri, S.; Ito, H.
Nature 331, 530-532, 1988
A:Title: Novel precursor of Alzheimer's disease amyloid protein shows protease inhibitor
A:Reference number: A38989; MUID:86122641; PMID:2893291
A:Accession: A38989
A:Molecule type: mRNA
A:Residues: 267-367 <KIT>

A:Cross-references: GB:X06981; NID:G28816; PIDN:CAA30041.1; PID:G929611
A:Experimental source: glioblastoma cell line
A:Note: alternative splice form APP(770)
R:Vitek, M.P.; Rasool, C.G.; de Sauvage, F.; Vitek, S.M.; Bartus, R.T.; Beer, B.; Ashton
Brain Res. Mol. Brain Res. 4, 121-131, 1988
A:Title: Absence of mutation in the beta-amyloid cDNAs cloned from the brains of three p
A:Reference number: A30320
A:Accession: A30320
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 284-288, 'V', 365-770 <VIT1>
A:Accession: B30320
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 122-288, 'V', 365-770 <VIT2>
A:Accession: C30320
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 606-770 <VIT3>
R:Zain, S.B.; Salim, M.; Chou, W.G.; Sajdel-Sulkowska, E.M.; Majocha, R.E.; Marotta, C.A
Proc. Natl. Acad. Sci. U.S.A. 85, 929-933, 1988
A:Title: Molecular cloning of amyloid cDNA derived from mRNA of the Alzheimer disease br
A:Reference number: A31087; MUID:88124954; PMID:2893379
A:Accession: A31087
A:Molecule type: mRNA
A:Residues: 507-770 <ZAI>
A:Cross-references: GB:M18734; NID:G178572; PIDN:AAA51726.1; PID:G178573
A:Note: the authors translated the codon GAA for residue 599 as Gly, ACC for residue 603
8 as Val, GTG for residue 609 as Asn, AAT for residue 610 as Gly, and GGT for residue 65
A:Note: the cited Genbank accession number, J03594, is not in release 101.0
R:Masters, C.L.; Multhaup, G.; Simms, G.; Potgiesser, J.; Martins, R.N.; Beyreuther, K

Query Match 100.0%; Score 217; DB 1; Length 770;
Best Local Similarity 100.0%; Pred. No. 1.8e-20;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DAEFRHDSGVVHVKLVFPFAEDVGSNGKAIIGLMVGGVIA 42
DB 672 DAEFRHDSGVVHVKLVFPFAEDVGSNGKAIIGLMVGGVIA 713

RESULT 11
A27485
Alzheimer's disease amyloid beta/A4 protein homolog precursor - mouse
N:Alternate names: proteinase nexin II
C:Species: Mus musculus (house mouse)
C:Date: 31-Mar-1989 #sequence_revision 31-Mar-1989 #text_change 13-Aug-1999
C:Accession: A27485; S19727; I49485
R:Yamada, T.; Sasaki, H.; Furuya, H.; Miyata, T.; Goto, I.; Sakaki, Y.
Biochem. Biophys. Res. Commun. 149, 665-671, 1987
A:Title: Complementary DNA for the mouse homolog of the human amyloid beta protein precu
A:Reference number: A27485; MUID:86106489; PMID:3322280
A:Accession: A27485
A:Molecule type: mRNA
A:Residues: 1-695 <YAM>
A:Cross-references: GB:M18373; NID:G191568; PIDN:AAA37139.1; PID:G309085
A:Experimental source: brain
R:de Strooper, B.; van Leeuwen, F.; van den Berghe, H.
Biochim. Biophys. Acta 1129, 141-143, 1991
A:Title: The amyloid beta protein precursor or proteinase nexin II from mouse is closer
A:Reference number: S19727; MUID:94096459; PMID:1756177
A:Accession: S19727
A:Molecule type: mRNA
A:Residues: 1-210, 'G', 212-220, 'S', 222-396, 'A', 398-402, 'T', 404-448, 'A', 450-695 <STR>
A:Cross-references: EMBL:X59379
R:Kizumi, R.; Yamada, T.; Yoshikai, S.; Sasaki, H.; Hattori, M.; Sakaki, Y.
Gene 111, 189-195, 1992
A:Title: Positive and negative regulatory elements for the expression of the Alzheimer's
A:Reference number: I49485; MUID:92209998; PMID:1555768
A:Accession: I49485
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-19 <RES>

A:Cross-references: GB:D10603; NID:g220328; PIDN:BA01456.1; PID:g220329
A:Genetics: lon. 16C3
A:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Keywords: alternative splicing; amyloid; transmembrane protein

Query Match 91.2%; Score 198; DB 2; Length 695;
Best Local Similarity 92.9%; Pred. No. 5.1e-18; Indels 0; Gaps 0;
Matches 39; Conservative 1; Mismatches 2

QY 1 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 42
DB 597 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 638

RESULT 12
S00550
Alzheimer's disease amyloid beta protein precursor - rat
N:Alternate names: beta-A4 amyloid protein
C:Species: Rattus norvegicus (Norway rat)
C:Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 13-Aug-1999
C:Accession: S00550; A41245; A39820; S45251
R:Shivers, B.D.; Hilbich, C.; Multhaup, G.; Salbaum, M.; Beyreuther, K.; Seeburg, P.H.
EMBO J. 7, 1365-1370, 1988
A:Title: Alzheimer's disease amyloidogenic glycoprotein: expression pattern in rat brain
A:Reference number: S00550; MUID:68312583; PMID:2900758
A:Accession: S00550
A:Molecule type: mRNA
A:Residues: 1-695 <SH1>
A:Cross-references: EMBL:X07648; NID:g55616; PIDN:CAA30488.1; PID:g55617
R:Schubert, D.; Schroeder, R.; LaCorbiere, M.; Saitoh, T.; Cole, G.
Science 241, 223-226, 1988
A:Title: Amyloid beta protein precursor is possibly a heparan sulfate proteoglycan core
A:Reference number: A41245; MUID:88264430; PMID:2968652
A:Accession: A41245
A:Molecule type: protein
A:Residues: 18-37, 'X', 39-40, 'X', 42-44 <SCH>
A:Note: evidence for heparan sulfate attachment
R:Hesse, L.; Behr, D.; Masters, C.L.; Multhaup, G.
FEBS Lett. 349, 109-116, 1994
A:Title: The beta-A4 amyloid precursor protein binding to copper.
A:Reference number: S46251; MUID:94320627; PMID:7913895
A:Contents: annotation; copper binding sites
A:Note: rat peptides were isolated but not sequenced
R:Potempska, A.; Styles, J.; Mehta, P.; Kim, K.S.; Maller, D.L.
J. Biol. Chem. 266, 8464-8469, 1991
A:Title: Purification and tissue level of the beta-amyloid peptide precursor of rat brain
A:Reference number: A39820; MUID:91217087; PMID:1673681
A:Accession: A39820
A>Status: preliminary
A:Molecule type: protein
A:Residues: 18-32 <POT>
A:Experimental source: brain
C:Comment: Deposition of amyloid protein as neurofibrillary tangles and/or plaques is characteristic of Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Keywords: alternative splicing; amyloid; glycoprotein; transmembrane protein
F:625-648/Domain: transmembrane #status predicted <TM>

Query Match 91.2%; Score 198; DB 2; Length 695;
Best Local Similarity 92.9%; Pred. No. 5.1e-18; Indels 0; Gaps 0;
Matches 39; Conservative 1; Mismatches 2

QY 1 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 42
DB 597 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 638

RESULT 13
JH0773
Alzheimer's disease amyloid beta protein precursor - African clawed frog
A:Species: Xenopus laevis (African clawed frog)
C:Date: 10-Jun-1993 #sequence_revision 10-Jun-1993 #text_change 13-Aug-1999
C:Accession: JH0773

R:Okado, H.; Okamoto, H.
Biochem. Biophys. Res. Commun. 189, 1561-1568, 1992
A:Title: A Xenopus homolog of the human beta-amyloid precursor protein: developmental
A:Reference number: JH0773; MUID:93129227; PMID:1282805
A:Accession: JH0773
A:Molecule type: mRNA
A:Residues: 1-747 <OKA>
A:Cross-references: GB:S52417; NID:g263150; PIDN:AA24853.1; PID:g263151
A:Experimental source: larva
C:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C:Keywords: alternative splicing; amyloid
F:287-337/Domain: animal Kunitz-type proteinase inhibitor homology <BPI>

Query Match 91.2%; Score 198; DB 2; Length 747;
Best Local Similarity 88.1%; Pred. No. 5.5e-18; Indels 1; Gaps 0;
Matches 37; Conservative 4; Mismatches 1

QY 1 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 42
DB 649 DSEYRHDTAYEVHVKQLVFFAEVDGSGNKGAIIGLMVGGVWIA 690

RESULT 14
S23094
beta-amyloid protein precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 03-May-1996
C:Accession: S23094
R:Kojima, S.; Omori, M.
FEBS Lett. 304, 57-60, 1992
A:Title: Two-way cleavage of beta-amyloid protein precursor by multicatalytic proteinase
A:Reference number: S23094; MUID:92316198; PMID:1618299
A:Accession: S23094
A:Molecule type: protein
A:Residues: 1-33 <NOV>
C:Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase

Query Match 61.3%; Score 133; DB 2; Length 33;
Best Local Similarity 89.3%; Pred. No. 6.6e-11; Indels 2; Gaps 0;
Matches 25; Conservative 1; Mismatches 2

QY 1 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNK 28
DB 6 DAEPFRHDSGYEVHVKQLVFFAEVDGSGNK 33

RESULT 15
A13228
Cryptosporidium 2-monooxygenase tmel [imported] - Agrobacterium tumefaciens (strain C58, Dupon
C:Species: Agrobacterium tumefaciens
C:Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 01-Feb-2002
C:Accession: A13228
R:Wood, D.W.; Stetubal, J.C.; Kaul, R.; Monke, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, L.
erage, G.; Gillet, W.; Grant, C.; Guenther, D.; Kuryavin, T.; Levy, R.; Li, M.; McClellan
; Karp, S.; Komoto, P.; Zhang, S.
Science 294, 2317-2323, 2001
A:Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm, E.
ste, E.W.
A:Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58.
A:Reference number: AB2577; PMID:11743193
A:Accession: A13228
A>Status: preliminary
A:Residues: 1-755 <KUR>
A:Experimental source: strain C58 (Dupont)
A:Cross-references: GB:AB008690; PIDN:AAL46247.1; PID:gl7744025; GSPDB:GN00189
A:Experimental source: strain C58 (Dupont)
A:Genetics: tmsl
A:Genome: plasmid
C:Superfamily: Agrobacterium plasmid tryptophan 2-monooxygenase

Query Match 29.0%; Score 63; DB 2; Length 755;
Best Local Similarity 44.4%; Pred. No. 3.3;

Qy 7 DSGYEVHHQKLVFAEDVGSNGKAI IGLMWGVVIA 42
||| : ||| ||| : |||
Db 223 DSG-----RIGFFPEDVPKPVAI IGAGISGLVVA 252

Search completed: April 21, 2003, 12:07:46
Job time : 20 secs

GenCore version 5.1.4.P5 4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:01:04 ; Search time 11 Seconds
(without alignments)
158.364 Million cell updates/sec

Title: US-09-580-018-42

Perfect score: 217

Sequence: 1 DAEFRHDSGYEVHQLVFF.....DVGSNKGLIQLMVGGVVIA 42

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	217	100.0	57	A4_PIG	Q29023 sus scrofa
2	217	100.0	57	A4_URMA	Q29149 ursus marit
3	217	100.0	58	A4_CANFA	Q28280 canis famil
4	217	100.0	58	A4_RABIT	Q28748 oryctolagus
5	217	100.0	58	A4_SHEEP	Q28757 ovis aries
6	217	100.0	59	A4_BOVIN	Q28053 bos taurus
7	217	100.0	751	A4_SALSC	Q95241 saimiri sci
8	217	100.0	770	A4_HUMAN	P05067 homo sapien
9	198	91.2	770	A4_MOUSE	P12023 mus musculu
10	198	91.2	770	A4_RAT	P08592 rattus norv
11	62	28.6	755	TR2M_AGR4	P04029 agrobacteri
12	61	28.1	755	TR2N_AGRVI	P21294 potato viru
13	57	26.3	327	POLG_PVYCH	P75462 mycoplasma
14	57	26.3	503	Y226_MYCPN	P54867 saccharomyc
15	56.5	26.0	378	SLG1_YEAST	Q28076 archaeoglob
16	55.5	25.6	297	PTF_ARCTU	P33008 pseudomonas
17	55	25.3	488	POLG_PVYN	P18247 p genome po
18	55	25.3	363	POLG_PVYN	P93733 arabidopsis
19	54.5	25.1	367	POLG_PVYIO	P18897 potato viru
20	54	24.9	284	POLG_PVYIO	P45972 caenorhabdi
21	53.5	24.7	708	Y228_CABEL	O51246 borrelia bu
22	53.5	24.7	971	Y228_BORBU	P23531 saccharomyc
23	52	24.0	611	YCR3_YEAST	O53677 mycobacteri
24	51	23.5	494	COBQ_MYCTU	Q23078 arabidopsis
25	51	23.5	769	ITB2_BOVIN	Q23078 arabidopsis
26	50.5	23.3	915	PDB2_ARATH	P44960 haemophilus
27	50	23.0	285	MENB_HAEIN	Q94540 homo sapien
28	50	23.0	1437	MRP5_HUMAN	Q94540 homo sapien
29	50	23.0	3579	STAN_DROME	Q12651 avian infec
30	49.5	22.8	1162	VGL2_IBVM	P30741 culex tarsa
31	49	22.6	246	TRIS_CULTA	Q92ca7 rickettsia
32	49	22.6	322	Y853_RICFR	Q92519 streptomyce
33	49	22.6	403	PKR_STRCO	

34	49	22.6	432	1	PURA_RHILO	Q98F97 rhizobium l
35	49	22.6	568	1	NIRS_PSEAB	P24474 pseudomonas
36	49	22.6	674	1	TML1_ARATH	P33543 arabidopsis
37	49	22.6	704	1	SSP2_BOMMO	P20613 bombyx mori
38	49	22.6	753	1	PPE2_HUMAN	O14830 homo sapien
39	49	22.6	757	1	PPE2_MOUSE	O35385 mus musculu
40	49	22.6	1080	1	HDC_DROME	Q9n2m8 drosophila
41	48.5	22.4	160	1	PMR1_ECOLI	P24093 escherichia
42	48.5	22.4	330	1	COAT_PEMV	P07993 pepper mott
43	48.5	22.4	393	1	CUNI_USTWA	P54424 ustilago ma
44	48.5	22.4	459	1	Y226_MYCSE	P47468 mycoplasma
45	48.5	22.4	497	1	GLYA_CHLEW	Q92831 chlamydia p

ALIGNMENTS

RESULT 1				
A4_PIG	ID_14_PIG	STANDARD;	PRT;	57 AA.
AC	Q29023;			
DT	01-NOV-1997 (Rel. 35, Created)			
DT	01-NOV-1997 (Rel. 35, Last sequence update)			
DT	16-OCT-2001 (Rel. 40, Last annotation update)			
DE	Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid			
DE	protein (Beta-APP) (A-beta)] (Fragment).			
GN	APP.			
OS	Sus scrofa (Pig).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.			
OX	NCBI_TaxID=9823;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Brain;			
RX	MEDLINE=9201079; PubMed=1656157;			
RA	Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;			
RT	"Conservation of the sequence of the Alzheimer's disease amyloid			
RT	peptide in dog, polar bear and five other mammals by cross-species			
RT	polymerase chain reaction analysis".			
RL	Brain Res. Mol. Brain Res. 10:299-305(1991).			
CC	-!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO			
CC	INTRACELLULAR SIGNALING PATHWAY THROUGH THE GTP-BINDING PROTEIN			
CC	G(O) (BY SIMILARITY).			
CC	-!- SUBCELLULAR LOCATION: Type I membrane protein.			
CC	-!- SIMILARITY: BELONGS TO THE APP FAMILY.			
CC	-----			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration			
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CC	the European Bioinformatics Institute. There are no restrictions on its			
CC	use by non-profit institutions as long as its content is in no way			
CC	modified and this statement is not removed. Usage by and for commercial			
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/			
CC	or send an email to license@isb-sib.ch).			
CC	-----			
CC	EMBL; X56127; CAA39592.1; --			
DR	HSSP; P05067; 1BA4.			
DR	InterPro; IPR001868; A4 APP.			
DR	InterPro; IPR001255; Beta-APP.			
DR	Pfam; PF03494; Beta-APP; 1.			
DR	PROSITE; PS00319; A4_EXTRA; PARTIAL.			
DR	PROSITE; PS00320; A4_INTRA; PARTIAL.			
KW	Glycoprotein; Amyloid; Neurone; Transmembrane.			
FT	NON_TER 1			
FT	CHAIN 6 48			
FT	DOMAIN <1 33			
FT	TRANSMEM 34 57			
FT	NON_TER 57 57			
FT	SEQUENCE 57 AA; 6172 MW; 84209D8E8A82DFA CRC64;			
FT	-----			
FT	BETA-AMYLOID PROTEIN (POTENTIAL).			
FT	EXTRACELLULAR (POTENTIAL).			
FT	POTENTIAL.			
FT	-----			

Query Match 100.0%; Score 217; DB 1; Length 57;
Best Local Similarity 100.0%; Pred. No. 7,9e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 42
 DB 6 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 47

RESULT 2
 A4 URSMA
 ID A4 URSMA STANDARD; PRT; 57 AA.
 AC Q23149;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last annotation update)
 DE Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid
 DE protein (Beta-APP) (A-beta)] (Fragment).
 GN APP.
 OS Ursus maritimus (Polar bear) (Thalarchos maritimus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Ursidae; Ursus.
 OX NCBI_TaxID=29073;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=92017079; PubMed=1656157;
 RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
 RT "Conservation of the sequence of the Alzheimer's disease amyloid
 RT peptide in dog, polar bear and five other mammals by cross-species
 RT polymerase chain reaction analysis";
 RL Brain Res. Mol. Brain Res. 10:299-305(1991).
 CC -!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO
 CC -!- INTRACELLULAR SIGNALING PATHWAY THROUGH THE GTP-BINDING PROTEIN
 CC G(O) (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.

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 CC -----
 CC EMBL; X56128; CAA39593.1; -;
 CC HSSP; P05067; 1BA4.
 CC InterPro; IPR001868; A4 APP.
 CC InterPro; IPR001255; Beta-APP.
 CC Pfam; PF03494; Beta-APP.1.
 CC PROSITE; PS00319; A4 EXTRA; PARTIAL.
 CC PROSITE; PS00320; A4 INTRA; PARTIAL.
 CC Glycoprotein; Amyloid; Neurone; Transmembrane.
 CC NON TER 1 1
 CC CHAIN 1 1
 CC DOMAIN <1 33 BETA-AMYLOID PROTEIN (POTENTIAL).
 CC TRANSMEM 34 57 EXTRACELLULAR (POTENTIAL).
 CC NON TER 57 57 POTENTIAL.
 CC SEQUENCE 57 AA; 6172 MW; 84209D88EBA82DFA CRC64;

Query Match 100.0%; Score 217; DB 1; Length 57;
 Best Local Similarity 100.0%; Pred. No. 7.9e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 42
 DB 6 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 47

RESULT 3
 A4 CANFA
 ID A4 CANFA STANDARD; PRT; 58 AA.
 AC Q28280;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last annotation update)

DE Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid
 DE protein (Beta-APP) (A-beta)] (Fragment).
 GN APP.
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Kidney;
 RX MEDLINE=92017079; PubMed=1656157;
 RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
 RT "Conservation of the sequence of the Alzheimer's disease amyloid
 RT peptide in dog, polar bear and five other mammals by cross-species
 RT polymerase chain reaction analysis";
 RL Brain Res. Mol. Brain Res. 10:299-305(1991).
 CC -!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO
 CC -!- INTRACELLULAR SIGNALING PATHWAY THROUGH THE GTP-BINDING PROTEIN
 CC G(O) (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.

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 CC -----
 CC EMBL; X56125; CAA39590.1; -;
 CC HSSP; P05067; 1BA4.
 CC InterPro; IPR001868; A4 APP.
 CC InterPro; IPR001255; Beta-APP.
 CC Pfam; PF03494; Beta-APP.1.
 CC PROSITE; PS00319; A4 EXTRA; PARTIAL.
 CC PROSITE; PS00320; A4 INTRA; PARTIAL.
 CC Glycoprotein; Amyloid; Neurone; Transmembrane.
 CC NON TER 1 1
 CC CHAIN 1 1
 CC DOMAIN <1 34 BETA-AMYLOID PROTEIN (POTENTIAL).
 CC TRANSMEM 35 58 EXTRACELLULAR (POTENTIAL).
 CC NON TER 58 58 POTENTIAL.
 CC SEQUENCE 58 AA; 6285 MW; 8469D488A2E12DFA CRC64;

Query Match 100.0%; Score 217; DB 1; Length 58;
 Best Local Similarity 100.0%; Pred. No. 8.1e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 42
 DB 7 DAEFRHDSGYEVHVKLVFAEDVGSNGKALIGLMVGGVIA 48

RESULT 4
 A4 RABIT
 ID A4 RABIT STANDARD; PRT; 58 AA.
 AC Q28748;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid
 DE protein (Beta-APP) (A-beta)] (Fragment).
 GN APP.
 OS Oryctolagus cuniculus (Rabbit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
 OX NCBI_TaxID=9986;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=92017079; PubMed=1656157;
 RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

RT "Conservation of the sequence of the Alzheimer's disease amyloid
RT peptide in dog, polar bear and five other mammals by cross-species
RT polymerase chain reaction analysis.";
RL Brain Res. Mol. Brain Res. 10:299-305(1991).
CC -!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO
CC GTP-BINDING PROTEIN
CC G(O) (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.
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CC
CC EMBL; X56129; CAA39594.1; -;
CC HSSP; P05067; 1BA4.
CC InterPro; IPR001868; A4_APP.
CC Pfam; PF03494; Beta-APP; 1.
CC PROSITE; PS00319; A4_EXTRA; PARTIAL.
CC PROSITE; PS00320; A4_INTRA; PARTIAL.
KW Glycoprotein; Amyloid; Neurone; Transmembrane.
FT NON_TER 1 1
FT CHAIN 6 48 BETA-AMYLOID PROTEIN (POTENTIAL).
FT DOMAIN <1 33 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 34 57 POTENTIAL.
FT DOMAIN 58 >58 CYTOPLASMIC (POTENTIAL).
FT NON_TER 58 58
SQ SEQUENCE 58 AA; 6300 MW; F434209D88EBA82D CRC64;

Query Match 100.0%; Score 217; DB 1; Length 58;
Best Local Similarity 100.0%; Pred. No. 8.1e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 DAEFRHDSGYEVHVKLVFFAEDVGSNGKGAIGLMVGWGVIA 42
DB 6 DAEFRHDSGYEVHVKLVFFAEDVGSNGKGAIGLMVGWGVIA 47

RESULT 5
A4_SHEEP
ID A4_SHEEP STANDARD; PRT; 58 AA.
AC Q28757;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DE Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid
DE protein (Beta-APP) (A-beta)] (Fragment).
GN APP.
OS Ovis aries (Sheep);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Heart;
RX MEDLINE=92017079; PubMed=1656157;
RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
RT "Conservation of the sequence of the Alzheimer's disease amyloid
RT peptide in dog, polar bear and five other mammals by cross-species
RT polymerase chain reaction analysis.";
RL Brain Res. Mol. Brain Res. 10:299-305(1991).
CC -!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO
CC GTP-BINDING PROTEIN
CC G(O) (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.
CC

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CC
CC EMBL; X56130; CAA39595.1; -;
CC HSSP; P05067; 1BA4.
CC InterPro; IPR001868; A4_APP.
CC Pfam; PF03494; Beta-APP; 1.
CC PROSITE; PS00319; A4_EXTRA; PARTIAL.
CC PROSITE; PS00320; A4_INTRA; PARTIAL.
KW Glycoprotein; Amyloid; Neurone; Transmembrane.
FT NON_TER 1 1
FT CHAIN 6 48 BETA-AMYLOID PROTEIN (POTENTIAL).
FT DOMAIN <1 33 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 34 57 POTENTIAL.
FT DOMAIN 58 >58 CYTOPLASMIC (POTENTIAL).
FT NON_TER 58 58
SQ SEQUENCE 58 AA; 6300 MW; F434209D88EBA82D CRC64;

Query Match 100.0%; Score 217; DB 1; Length 58;
Best Local Similarity 100.0%; Pred. No. 8.1e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 DAEFRHDSGYEVHVKLVFFAEDVGSNGKGAIGLMVGWGVIA 42
DB 6 DAEFRHDSGYEVHVKLVFFAEDVGSNGKGAIGLMVGWGVIA 47

RESULT 6
A4_BOVIN
ID A4_BOVIN STANDARD; PRT; 59 AA.
AC Q28053;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DE Alzheimer's disease amyloid A4 protein homolog [Contains: Beta-amyloid
DE protein (Beta-APP) (A-beta)] (Fragment).
GN APP.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=92017079; PubMed=1656157;
RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;
RT "Conservation of the sequence of the Alzheimer's disease amyloid
RT peptide in dog, polar bear and five other mammals by cross-species
RT polymerase chain reaction analysis.";
RL Brain Res. Mol. Brain Res. 10:299-305(1991).
CC -!- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO
CC GTP-BINDING PROTEIN
CC G(O) (BY SIMILARITY).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.
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CC
CC EMBL; X56124; CAA39589.1; -;
CC EMBL; X56126; CAA39591.1; -;
CC

DR HSP; P05067; 1BA4.
 DR InterPro: IPR001868; A4 APP.
 DR InterPro: IPR001255; Beta-APP.
 DR Pfam: PF03494; Beta-APP; 1.
 DR PROSITE: PS00319; A4 EXTRA; PARTIAL.
 DR PROSITE: PS00320; A4 INTRA; PARTIAL.
 KW Glycoprotein; Amyloid; Neurone; Transmembrane.
 FT CHAIN 1 49 BETA-AMYLOID PROTEIN (POTENTIAL).
 FT DOMAIN 31 34 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 35 58 POTENTIAL.
 FT DOMAIN 59 >59 CYTOPLASMIC (POTENTIAL).
 FT NON_TER 59 59
 SQ SEQUENCE 59 AA; 6414 MW; F43469D48A2E12D CRC64;
 Query Match 100.0%; Score 217; DB 1; Length 59;
 Best Local Similarity 100.0%; Pred. No. 8.2e-22;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEEDVGSNKGALIGLMVGWVIA 42
 DB 7 DAEFRHDSGYEVHOKLVFFAEEDVGSNKGALIGLMVGWVIA 48
 RESULT 7
 A4_SAISC STANDARD; PRT; 751 AA.
 AC Q95241;
 DT 15-DEC-1998 (Rel. 37; Created)
 DT 15-DEC-1998 (Rel. 37; Last sequence update)
 DE 16-OCT-2001 (Rel. 40; Last annotation update)
 DE Alzheimer's disease amyloid A4 protein precursor [Contains: Beta-amyloid protein (Beta-APP) (A-beta)].
 GN APP
 OS Saimiri sciureus (Common squirrel monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cebidae; Cebinae; Saimiri.
 OX NCBI_TaxID=9521;
 RN [1]
 RP TISSUE=Liver, and Kidney;
 RC MEDLINE=96108492; PubMed=8532114;
 RA Levy E., Amorim A., Frangione B., Walker L.C.;
 RT "Beta-amyloid precursor protein gene in squirrel monkeys with cerebral amyloid angiopathy.";
 RL Neurobiol. Aging 16:805-808(1995).
 CC -1- FUNCTION: FUNCTIONAL NEURONAL RECEPTOR WHICH COUPLES TO INTRACELLULAR SIGNALING PATHWAY THROUGH THE GTP-BINDING PROTEIN G(O).
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- DOMAIN: THE CLATHRIN-BINDING SITE IS ESSENTIAL FOR ITS ASSOCIATION WITH X11-ALPHA, -BETA, AND -GAMMA. THE SEQUENCE SPECIFIC RECOGNITION EXTENDS TO PEPTIDE RESIDUES THAT ARE C-TERMINAL TO THE NPXY MOTIF. THIS INTERACTION APPEARS TO BE INDEPENDENT OF PHOSPHORYLATION (BY SIMILARITY).
 CC -1- SIMILARITY: BELONGS TO THE APP FAMILY.
 CC -1- SIMILARITY: CONTAINS 1 BPTI/KUNITZ INHIBITOR DOMAIN.
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 CC EMBL; S81024; AAD14347.1; -;
 DR HSP; P05067; 1AAP.
 DR InterPro: IPR001868; A4 APP.
 DR InterPro: IPR001255; Beta-APP.
 DR InterPro: IPR002223; Kunitz BPTI.
 DR Pfam: PF00014; Kunitz BPTI; 1.
 DR Pfam: PF02177; A4_EXTRA; 1.

DR Pfam: PF03494; Beta-APP; 1.
 DR PRINTS: PRO0203; AMYLOIDA4.
 DR PRINTS: PRO0759; BASICPTASE.
 DR ProDom: PD000222; Kunitz BPTI; 1.
 DR SMART: SM00006; A4_EXTRA; 1.
 DR SMART: SM00131; KU; 1.
 DR PROSITE: PS00319; A4 EXTRA; 1.
 DR PROSITE: PS00320; A4 INTRA; 1.
 DR PROSITE: PS00280; BPTI_KUNITZ_1; 1.
 DR PROSITE: PS0279; BPTI_KUNITZ_2; 1.
 KW Glycoprotein; Amyloid; Neurone; Transmembrane; Alternative splicing;
 KW Signal; Serine protease inhibitor.
 FT SIGNAL 1 17 BY SIMILARITY.
 FT CHAIN 18 751 A4 PROTEIN.
 FT CHAIN 653 695 BETA-AMYLOID PROTEIN (POTENTIAL).
 FT DOMAIN 18 680 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 681 704 POTENTIAL.
 FT DOMAIN 705 751 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 287 345 BPTI/KUNITZ INHIBITOR.
 FT SITE 740 743 CLATHRIN-BINDING (BY SIMILARITY).
 FT ACT_SITE 301 302 REACTIVE BOND.
 FT DISULFID 291 341 BY SIMILARITY.
 FT DISULFID 300 324 BY SIMILARITY.
 FT DISULFID 316 337 BY SIMILARITY.
 FT CAREOHYD 523 523 N-LINKED (GLCNAC...) (PROBABLE).
 FT CAREOHYD 552 552 N-LINKED (GLCNAC...) (PROBABLE).
 SQ SEQUENCE 751 AA; 84893 MW; 6C3E431089569049 CRC64;
 Query Match 100.0%; Score 217; DB 1; Length 751;
 Best Local Similarity 100.0%; Pred. No. 1.1e-20;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEEDVGSNKGALIGLMVGWVIA 42
 DB 653 DAEFRHDSGYEVHOKLVFFAEEDVGSNKGALIGLMVGWVIA 694
 RESULT 8
 A4_HUMAN STANDARD; PRT; 770 AA.
 ID AC P05067; P09000; Q16011;
 DT 13-AUG-1987 (Rel. 05; Created)
 DT 01-NOV-1991 (Rel. 20; Last sequence update)
 DT 16-OCT-2001 (Rel. 40; Last annotation update)
 DE Alzheimer's disease amyloid A4 protein precursor (Protease nexin-II) (PN-II) (APP) [Contains: Beta-amyloid protein (Beta-APP) (A-beta)].
 GN APP OR A4 OR CVAP OR AD1.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=87144572; PubMed=2881207;
 RA Kang J., Lemaire H.-G., Unterbeck A., Salbaum J.M., Masters C.L., Grzeschik K.-H., Multhaup G., Beyreuther K., Mueller-Hill B.;
 RT "The precursor of Alzheimer's disease amyloid A4 protein resembles a cell-surface receptor.";
 RL Nature 325:733-736(1987).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=88122639; PubMed=2893289;
 RA Ponte P., Gonzalez-Dewhitt P., Schilling J., Miller J., Hsu D., Greenberg B., Davis K., Wallace W., Lieberburg I., Fuller F., Cordell B.;
 RT "A new A4 amyloid mRNA contains a domain homologous to serine protease inhibitors.";
 RL Nature 331:525-527(1988).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89128427; PubMed=2783775;
 RA Lemaire H.G., Salbaum J.M., Multhaup G., Kang J., Bayney R.M.,

RA Unterbeck A., Beyreuther K., Mueller-Hill B.;
 RT "The PrA4(695) precursor protein of Alzheimer's disease A4 amyloid
 RL is encoded by 16 exons.";
 RN Nucleic Acids Res. 17:517-522(1989).
 [4]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97263807; PubMed=9108164;
 RA Hattori M., Tsukahara F., Furuhata Y., Tanahashi H., Hirose M.,
 SA Saito M., Tsukui S., Sakaki Y.;
 RT "A novel method for making nested deletions and its application for
 RL sequencing of a 300 kb region of human APP locus.";
 RN Nucleic Acids Res. 25:1802-1808(1997).
 [5]
 RP SEQUENCE OF 286-345 AND 365-366 FROM N.A.
 RX MEDLINE=88122640; PubMed=2893290;
 RA Tanzi R.E., McClatchey A.I., Lamperti E.D., Villa-Komaroff L.,
 SA Gusella J.F., Neve R.L.;
 RT "Protease inhibitor domain encoded by an amyloid protein precursor
 RL mRNA associated with Alzheimer's disease.";
 RN Nature 331:528-530(1988).
 [6]
 RP SEQUENCE OF 287-367 FROM N.A.
 RX MEDLINE=88122641; PubMed=2893291;
 RA Kitaguchi N., Takahashi Y., Tokushima Y., Shiojiri S., Ito H.;
 RT "Novel precursor of Alzheimer's disease amyloid protein shows
 RL protease inhibitory activity.";
 RN Nature 331:530-532(1988).
 [7]
 RP SEQUENCE OF 284-289 AND 365-770 FROM N.A.
 RX MEDLINE=87231971; PubMed=3035574;
 RA Robakis N.K., Ramakrishna N., Wolfe G., Wisniewski H.M.;
 RT "Molecular cloning and characterization of a cDNA encoding the
 RL cerebrovascular and the neuritic plaque amyloid peptides.";
 RN Proc. Natl. Acad. Sci. U.S.A. 84:4190-4194(1987).
 [8]
 RP SEQUENCE OF 507-770 FROM N.A.
 RX MEDLINE=88124954; PubMed=2893379;
 RA Zain S.B., Salim M., Chou W.G., Sajdel-Sulkowska E.M., Majocha R.E.,
 SA Marotta C.A.;
 RT "Molecular cloning of amyloid cDNA derived from mRNA of the Alzheimer
 RL disease brain: coding and noncoding regions of the fetal precursor
 RN mRNA are expressed in the cortex.";
 RN Proc. Natl. Acad. Sci. U.S.A. 85:929-933(1988).
 [9]
 RP SEQUENCE OF 672-681.
 RX MEDLINE=88035004; PubMed=3312495;
 RA Pardridge W.M., Vinters H.V., Yang J., Eisenberg J., Choi T.B.,
 RA Tourtellotte W.W., Huebner V., Shively J.B.;
 RT "Amyloid angiopathy of Alzheimer's disease: amino acid composition
 RL and partial sequence of a 4,200-dalton peptide isolated from cortical
 RN microvessels.";
 RN J. Neurochem. 49:1394-1401(1987).
 [10]
 RP SEQUENCE OF 739-770 FROM N.A.
 RX MEDLINE=90236318; PubMed=2110105;
 RA Yoshikawa S.-I., Sakaki H., Doh-Ura K., Furuya H., Sakaki Y.;
 RT "Genomic organization of the human amyloid beta-protein precursor
 RL gene.";
 RN Gene 87:257-263(1990).
 [11]
 RP SEQUENCE OF 1-10 FROM N.A.
 RX TISSUE=Liver;
 RA Schon E.A., Mita S., Sadlock J., Herbert J.;
 RT "A cDNA specifying the human amyloid beta precursor protein (ABPP)
 RL encodes a 95-kDa polypeptide.";
 RN Nucleic Acids Res. 16:9351-9351(1988).
 [12]
 RP SEQUENCE OF 18-50.
 RX MEDLINE=87250462; PubMed=3597385;
 RA van Nostrand W.E., Cunningham D.D.;
 RT "Purification of protease nexin II from human fibroblasts.";
 RL J. Biol. Chem. 262:8508-8514(1987).

RN [13]
 RP IDENTITY OF APP WITH NEXIN-II.
 RX MEDLINE=89384866; PubMed=2506449;
 RA Oltersdorf T., Fritz L.C., Schenk D.B., Lieberburg I.,
 RA Johnson-Wood K.L., Beattie B.C., Ward P.J., Blacher R.W., Dovey H.F.,
 RA Sinha S.;
 RT "The secreted form of the Alzheimer's amyloid precursor protein with
 RL the Kunitz domain is protease nexin-II.";
 RN Nature 341:144-147(1989).
 [14]
 RP PROTEASE-SPECIFICITY OF INHIBITOR DOMAIN.
 RX MEDLINE=90211252; PubMed=1969731;
 RA Kido H., Fukutomi A., Schilling J., Wang Y., Cordell B., Katunuma N.;
 RT "Protease-specificity of Kunitz inhibitor domain of Alzheimer's
 RL disease amyloid protein precursor.";
 RN Biochem. Biophys. Res. Commun. 167:716-721(1990).
 [15]
 RP COMPLEX WITH G(O).
 RX MEDLINE=93188965; PubMed=8446172;
 RA Nishimoto I., Okamoto T., Matsuura Y., Takahashi S., Okamoto T.,
 RA Murayama Y., Ogata E.;
 RT "Alzheimer amyloid protein precursor complexes with brain GTP-binding
 RL protein G(O).";
 RN Nature 362:75-79(1993).
 [16]
 RP X-RAY CRYSTALLOGRAPHY (1.8 ANGSTROMS) OF 28-133.
 RX MEDLINE=99215582; PubMed=10201399;
 RA Rossjohn J., Cappai R., Feil S.C., Henry A., McKinstry W.J.,
 RA Galatis D., Hesse L., Multhaup G., Beyreuther K., Masters C.L.,
 RA Parker M.W.;
 RT "Crystal structure of the N-terminal, growth factor-like domain of
 RL Alzheimer amyloid precursor protein.";
 RN Nat. Struct. Biol. 6:327-331(1999).
 [17]
 RP X-RAY CRYSTALLOGRAPHY (1.5 ANGSTROMS) OF 287-344.
 RX MEDLINE=91104913; PubMed=2125487;
 RA Hynes T.R., Randal M., Kennedy L.A., Eigenbrot C., Kosiakof A.A.;
 RT "X-ray crystal structure of the protease inhibitor domain of
 RL Alzheimer's amyloid beta-protein precursor.";
 RN Biochemistry 29:10018-10022(1990).
 [18]
 RP STRUCTURE BY NMR OF 289-344.
 RX MEDLINE=92031488; PubMed=1718421;
 RA Heald S.L., Tilton R.F. Jr., Hammond L.S., Lee A., Bayney R.M.,
 RA Kamarc M.E., Ramabhadran T.V., Dreyer R.N., Davis G., Unterbeck A.,
 RA Tamburini P.P.;
 RT "Sequential NMR resonance assignment and structure determination of
 RL the Kunitz-type inhibitor domain of the Alzheimer's beta-amyloid
 RN precursor protein.";
 RN Biochemistry 30:10467-10478(1991).
 [19]
 RP STRUCTURE BY NMR OF 672-699.
 RX MEDLINE=94281210; PubMed=7516706;
 RA Talafous J., Marcinkowski K.J., Klopman G., Zagorski M.G.;
 RT "Solution structure of residues 1-28 of the amyloid beta-peptide.";
 RN Biochemistry 33:7788-7796(1994).
 [20]
 RP STRUCTURE BY NMR OF 696-706.
 RX MEDLINE=97128622; PubMed=8973180;
 RA Kohno I., Kobayashi K., Maeda I., Sato K., Takashima A.;
 RT "Three-dimensional structures of the amyloid beta peptide (25-35) in
 RL membrane-mimicking environment.";
 RN Biochemistry 35:16094-16104(1996).
 [21]
 RP STRUCTURE BY NMR OF 672-711.
 RX MEDLINE=98359783; PubMed=9693002;
 RA Coles M., Bicknell W., Watson A.A.;
 RT "Solution structure of amyloid beta-peptide(1-40) in a water-micelle
 RL environment. Is the membrane-spanning domain where we think it is?";
 RN Biochemistry 37:11064-11077(1998).
 [22]
 RP STRUCTURE BY NMR OF 672-699.
 RX MEDLINE=20400066; PubMed=10940222;

RA Poulsen S.-A., Watson A.A., Craik D.J.;
 RT "Solution structures in aqueous SDS micelles of two amyloid beta
 RT peptides of Abeta(1-28) mutated at the alpha-secretase cleavage
 RT site.";
 RL J. Struct. Biol. 130:142-152(2000).
 RN [23]
 RP STRUCTURE BY NMR OF 681-706.
 RX MEDLINE=20400065; PubMed=10940221;
 RA Zhang S., Iwata K., Lachemann M.J., Peng J.W., Li S., Stimson E.R.,
 RA Lu Y., Felix A.M., Maggio J.E., Lee J.P.;
 RT "The Alzheimer's peptide a beta adopts a collapsed coil structure in
 RT water.";
 RL J. Struct. Biol. 130:130-141(2000).
 RN [24]
 RP SIGNAL SEQUENCE CLEAVAGE SITE, AND TOPOLOGY.
 RX MEDLINE=88296437; PubMed=2900137;
 RA Dykes T., Weidemann A., Multhaup G., Salbaum J.M., Lemaire H.-G.,
 RA Kang J., Mueller-Hill B., Masters C.L., Beyreuther K.;
 RT "Identification, transmembrane orientation and biogenesis of the
 RT amyloid A4 precursor of Alzheimer's disease.";
 RN [25]
 RP Query Match 100.0%; Score 217; DB 1; Length 770;
 RP Best Local Similarity 100.0%; Pred. No. 1.1e-20;
 RP Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 DB 672 DAEFRHDSGYVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 713
 RESULT 9
 A4_MOUSE
 ID_A4_MOUSE STANDARD; PRT; 770 AA.
 AC P12023;
 DT 01-OCT-1989 (Rel. 12, Created)
 DT 01-DEC-1992 (Rel. 24, Last sequence update)
 DT 1e-OCT-2001 (Rel. 40, Last annotation update)
 DE Alzheimer's disease amyloid A4 protein homolog precursor
 DE (Amyloidogenic glycoprotein) (AG).
 GN APP.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE OF 1-289 AND 365-770 FROM N.A.
 RC STRAIN=BA1B/G; TISSUE=Brain;
 RX MEDLINE=92096458; PubMed=1756177;
 RA de Strooper B., van Leeuwen F., van den Berghe H.;
 RT "The amyloid beta protein precursor or proteinase nexin II from mouse
 RT is closer related to its human homolog than previously reported.";
 RL Biochim. Biophys. Acta 1129:141-143(1991).
 RN [2]
 RP SEQUENCE OF 1-289 AND 365-770 FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=88106489; PubMed=3322280;
 RA Yamada T., Sasaki H., Furuya H., Miyata T., Goto I., Sasaki Y.;
 RT "Complementary DNA for the mouse homolog of the human amyloid beta
 RT protein precursor.";
 RL Biochem. Biophys. Res. Commun. 149:665-671(1987).
 RN [3]
 RP REVISIONS.
 RA Yamada T.;
 RL Submitted (MAR-1988) to the EMBL/GenBank/DBJ databases.
 RN [4]
 RP SEQUENCE OF 289-364 FROM N.A.
 RC STRAIN=CD-1; TISSUE=Placenta;
 RX MEDLINE=89345111; PubMed=2569710;
 RA Fukuchi K., Martin G.M., Deeb S.S.;
 RT "Sequence of the protease inhibitor domain of the A4 amyloid protein
 RT precursor of Mus domesticus.";
 RL Nucleic Acids Res. 17:5396-5396(1989).
 RN [5]

RP SEQUENCE OF 1-19 FROM N.A.
 RX MEDLINE=92209998; PubMed=1555768;
 RA Izumi R., Yamada T., Yoshikai S.I., Sasaki H., Hattori M.,
 RA Sakai Y.;
 RT "Positive and negative regulatory elements for the expression of the
 RT Alzheimer's disease amyloid precursor-encoding gene in mouse.";
 RL Gene 112:189-195(1992).
 RN [6]
 RP SEQUENCE OF 281-390 FROM N.A., AND ALTERNATIVE SPLICING.
 RX TISSUE=Brain, and Kidney; PubMed=2493250;
 RA Yamada T., Sasaki H., Dohura K., Goto I., Sasaki Y.;
 RT "Structure and expression of the alternatively-spliced forms of mRNA
 RT for the mouse homolog of Alzheimer's disease amyloid beta protein
 RT precursor.";
 RL Biochem. Biophys. Res. Commun. 158:906-912(1989).
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- ALTERNATIVE PRODUCTS: 5 ISOFORMS; APP(395), APP(563), APP(695),
 CC APP(751) AND APP(770) (SHOWN HERE); ARE PRODUCED BY ALTERNATIVE
 CC SPLICING.
 CC -!- TISSUE SPECIFICITY: AAA(770) IS EXPRESSED IN KIDNEY, AAA(751) IS
 CC WIDELY EXPRESSED. AAA(695) IS EXPRESSED IN BRAIN, KIDNEY AND
 CC LIVER.
 CC -!- DOMAIN: THE CLATHRIN-BINDING SITE IS ESSENTIAL FOR ITS ASSOCIATION
 CC WITH X11-ALPHA, -BETA, AND -GAMMA. THE SEQUENCE SPECIFIC
 CC RECOGNITION EXTENDS TO PEPTIDE RESIDUES THAT ARE C-TERMINAL TO THE
 CC NPXY MOTIF. THIS INTERACTION APPEARS TO BE INDEPENDENT OF
 CC PHOSPHORYLATION (BY SIMILARITY).
 CC -!- SIMILARITY: BELONGS TO THE APP FAMILY.
 CC -!- SIMILARITY: CONTAINS 1 BPTI/KUNITZ INHIBITOR DOMAIN.
 CC
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 CC
 CC EMBL; X59379; -; NOT ANNOTATED_CDS.
 CC EMBL; M18373; AAA37139.1; -;
 CC EMBL; X15210; CAA33280.1; -;
 CC EMBL; D10603; BAA01456.1; -;
 CC EMBL; M24397; AAA39929.1; -;
 CC PIR; A27485; A27485.
 CC PIR; S04855; S04855.
 CC PIR; S19727; S19727.
 CC KSSP; P05067; IAP.
 CC MGD; MGI:88059; App.
 CC InterPro; IPR001868; A4_APP.
 CC InterPro; IPR001255; Beta-APP.
 CC InterPro; IPR002223; Kunitz_BPTI.
 CC Pfam; PF00014; Kunitz_BPTI; 1.
 CC Pfam; PF02177; A4_EXTRA; 1.
 CC Pfam; PF03494; Beta-APP; 1.
 CC PRINTS; PR00203; AMYLOIDA4.
 CC PRINTS; PR00759; BASICPTASE.
 CC ProDom; PD000222; Kunitz_BPTI; 1.
 CC SMART; SM00006; A4_EXTRA; 1.
 CC SMART; SM00131; KUF; 1.
 CC PROSITE; PS00319; A4_EXTRA; 1.
 CC PROSITE; PS00320; A4_INTRA; 1.
 CC PROSITE; PS00280; BPTI_KUNITZ_1; 1.
 CC PROSITE; PS0279; BPTI_KUNITZ_2; 1.
 KW Glycoprotein; Amyloid; Neurone; Transmembrane; Signal;
 KW Alternative splicing; Serine protease inhibitor.
 FT SIGNAL 1 17
 FT CHAIN 18 770
 FT ALZHEIMER'S DISEASE AMYLOID A4 PROTEIN
 FT HOMOLOG.
 FT DOMAIN 18 699
 FT EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 700 723
 FT POTENTIAL.
 FT DOMAIN 724 770
 FT CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 673 715
 FT EQUIVALENT OF BETA-AMYLOID PROTEIN.

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FT DOMAIN 287 345 BPTI/KUNITZ INHIBITOR.
FT SITE 759 762 CLATHRIN-BINDING (BY SIMILARITY).
FT DISULFID 291 341 BY SIMILARITY.
FT DISULFID 300 324 BY SIMILARITY.
FT DISULFID 316 337 BY SIMILARITY.
FT CARBOHYD 542 542 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 571 571 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPLIC 289 289 E -> V (IN ISOFORM APP(695)).
FT VARSPLIC 290 364 MISSING (IN ISOFORM APP(695)).
FT VARSPLIC 346 380 MISSING (IN ISOFORM APP(751)).
FT SEQUENCE 770 AA; 86752 MW; 26C50DE0890CAFTA CRC64;

Query Match 91.2%; Score 198; DB 1; Length 770;
Best Local Similarity 92.9%; Pred. No. 3.4e-18;
Matches 39; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 DA6FRHDSGEVHVHOKLVFFAEDVGSNGKALIGLMVGGVIA 42
Db 672 DA6FGHDSGEVHVHOKLVFFAEDVGSNGKALIGLMVGGVIA 713

RESULT 10
A4_RAT
ID_A4_RAT STANDARD; PRT; 770 AA.
AC P05592;
DT 01-AUG-1988 (Rel. 08, Created)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Alzheimer's disease amyloid A4 protein homolog precursor
DE (Amyloidogenic glycoprotein) (AG).
GN APP.
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus;
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE OF 1-289 AND 365-770 FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=88312583; PubMed=2900758;
RA Shivers B.D., Hilbich C., Multhaup G., Salbaum J.M., Beyreuther K.,
RA Seeburg P.H.; disease amyloidogenic glycoprotein: expression pattern
RT in rat brain suggests a role in cell contact.;
RL EMBO J. 7:1365-1370(1988).
RN [2]
RP SEQUENCE OF 289-364 FROM N.A.
RC TISSUE=Liver;
RX MEDLINE=89183625; PubMed=2648331;
RA Kang J., Mueller-Hill B.;
RT "The sequence of the two extra exons in rat preA4.";
RL Nucleic Acids Res. 17:2130-2130(1989).
CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
CC -1- ALTERNATIVE PRODUCTS: 5 ISOFORMS; APP(395), APP(563), APP(695),
CC APP(751) AND APP(770) (SHOWN HERE); ARE PRODUCED BY ALTERNATIVE
CC SPLICING.
CC -1- DOMAIN: THE CLATHRIN-BINDING SITE IS ESSENTIAL FOR ITS ASSOCIATION
CC WITH X11-ALPHA, -BETA, AND -GAMMA. THE SEQUENCE SPECIFIC
CC RECOGNITION EXTENDS TO PEPTIDE RESIDUES THAT ARE C-TERMINAL TO THE
CC NPXY MOTIF. THIS INTERACTION APPEARS TO BE INDEPENDENT OF
CC PHOSPHORYLATION (BY SIMILARITY).
CC -1- SIMILARITY: BELONGS TO THE APP FAMILY.
CC -1- SIMILARITY: CONTAINS 1 BPTI/KUNITZ INHIBITOR DOMAIN.
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CC -----
DR EMBL; X07648; CAA30488.1; -
DR EMBL; X14066; CAA32229.1; -

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DR PIR; S00550; S00550.
DR HSP; P05067; IAAP.
DR InterPro; IPR001868; A4_APP.
DR InterPro; IPR001255; Beta-APP.
DR InterPro; IPR002223; Kunitz_BPTI.
DR Pfam; PF00014; Kunitz_BPTI; 1.
DR Pfam; PF02177; A4_EXTRA; 1.
DR Pfam; PF03494; Beta-APP; 1.
DR PRINTS; PRO0203; AMYLOIDA4.
DR PRINTS; PRO0759; BASICPTASE.
DR ProDom; PD000222; Kunitz_BPTI; 1.
DR SMART; SM00006; A4_EXTRA; 1.
DR SMART; SM00131; KU; 1.
DR PROSITE; PS00319; A4_EXTRA; 1.
DR PROSITE; PS00320; A4_INTRA; 1.
DR PROSITE; PS00280; BPTI_KUNITZ_1; 1.
DR PROSITE; PS00279; BPTI_KUNITZ_2; 1.
KW Glycoprotein; Amyloid; Neurone; Transmembrane; Signal;
KW Alternative splicing; Serine protease inhibitor.
FT SIGNAL 1 17
FT CHAIN 18 770
FT DOMAIN 18 699 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 700 723 POTENTIAL.
FT DOMAIN 724 770 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 673 715 EQUIVALENT OF BETA-AMYLOID PROTEIN.
FT DOMAIN 287 345 BPTI/KUNITZ INHIBITOR.
FT SITE 759 762 CLATHRIN-BINDING (BY SIMILARITY).
FT DISULFID 291 341 BY SIMILARITY.
FT DISULFID 300 324 BY SIMILARITY.
FT DISULFID 316 337 BY SIMILARITY.
FT CARBOHYD 542 542 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 571 571 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPLIC 289 289 E -> V (IN ISOFORM APP(695)).
FT VARSPLIC 290 364 MISSING (IN ISOFORM APP(695)).
SQ SEQUENCE 770 AA; 86704 MW; C26C9D6B2D929A7 CRC64;

Query Match 91.2%; Score 198; DB 1; Length 770;
Best Local Similarity 92.9%; Pred. No. 3.4e-18;
Matches 39; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 DA6FRHDSGEVHVHOKLVFFAEDVGSNGKALIGLMVGGVIA 42
Db 672 DA6FGHDSGEVHVHOKLVFFAEDVGSNGKALIGLMVGGVIA 713

RESULT 11
TR2M AGRT4
ID TR2M AGRT4 STANDARD; PRT; 755 AA.
AC P04029;
DT 23-OCT-1986 (Rel. 02, Created)
DT 23-OCT-1986 (Rel. 02, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Tryptophan 2-monooxygenase (EC 1.13.12.3).
GN TWS1.
OS Agrobacterium tumefaciens (strain Ach5), and
OS Agrobacterium tumefaciens.
OG Plasmid pTiAch5, and Plasmid pTiAgNC.
OC Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
OC Rhizobiaceae; Rhizobium.
OX NCBI_TaxID=176298; 358;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Ach5; PLASMID=PTiAch5;
RX MEDLINE=84207942; PubMed=6327292;
RA Gielen J., de Beuckeleer M., Seurinck J., Deboeck F., de Greve H.,
RA Lemmers M., van Montagu M., Schell J.;
RA "The complete nucleotide sequence of the Tl-DNA of the Agrobacterium
RT tumefaciens plasmid pTiAch5.";
RL EMBO J. 3:835-846(1984).
RN [2]
RP SEQUENCE FROM N.A.

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DR EMBL; X54058; CAA37993.1; -;
 DR PIR; S11549; S11549.
 DR InterPro; IPR001592; Pcty_Coat.
 DR Pfam; PF00767; Pcty_Coat; 1.
 KW Transferase; RNA-directed RNA polymerase; Coat protein; Polyprotein.
 FT NON TER 1
 FT CHAIN <1 60 NUCLEAR INCLUSION PROTEIN B.
 FT CHAIN 61 327 COAT PROTEIN
 FT CHAIN 327 327
 SQ SEQUENCE 327 AA; 36868 MW; 8F8355E2D86F2F18 CRC64;

Query Match 26.3%; Score 57; DB 1; Length 327;
 Best Local Similarity 53.1%; Pred. No. 3.7;
 Matches 17; Conservative 0; Mismatches 5; Indels 10; Gaps 3;

QY 1 DAEPHSDGYEVHOKLVFFABD---VGSNK 28
 DB 47 DDEFFDS-YEVHHQ-----ANDTIDAVGDNK 72

RESULT 14

Y226 MYCPN
 ID Y226 MYCPN STANDARD; PRT; 503 AA.
 AC P75452;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Hypothetical protein MG226 homolog (F10_Orf503).
 GN MPN319 OR MP517.
 OS Mycoplasma pneumoniae.
 CC Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
 OC NCBI_TaxID=2104;
 RN NCBI_TaxID=2104;
 RP SEQUENCE FROM N.A.
 RC STRAIN=ATCC 29342 / M129;
 RX MEDLINE=97105895; PubMed=8948633;
 RA Himmelreich R., Hilbert H., Plagens H., Pirkel E., Li B.-C.,
 RA Herrmann R.;
 RT "Complete sequence analysis of the genome of the bacterium Mycoplasma
 RT pneumoniae";
 RL Nucleic Acids Res. 24:4420-4449 (1996).
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein (Potential).
 CC -!- SIMILARITY: TO M.GENITALIUM MG225.

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CC EMBL; AE000051; AAB95165.1; -;
 DR InterPro; IPR002293; AA/rel_pmease1.
 DR InterPro; IPR004841; Pemease.
 DR Pfam; PF00324; aa_permeases; 1.
 KW Hypothetical protein, Transmembrane; Complete proteome.
 FT TRANSMEM 20 40 POTENTIAL.
 FT TRANSMEM 43 63 POTENTIAL.
 FT TRANSMEM 106 126 POTENTIAL.
 FT TRANSMEM 138 158 POTENTIAL.
 FT TRANSMEM 166 186 POTENTIAL.
 FT TRANSMEM 215 235 POTENTIAL.
 FT TRANSMEM 249 269 POTENTIAL.
 FT TRANSMEM 301 321 POTENTIAL.
 FT TRANSMEM 359 379 POTENTIAL.
 FT TRANSMEM 405 425 POTENTIAL.
 FT TRANSMEM 443 463 POTENTIAL.
 FT TRANSMEM 468 488 POTENTIAL.
 SQ SEQUENCE 503 AA; 54960 MW; 4BC1BFDE036985B2 CRC64;

Query Match 26.3%; Score 57; DB 1; Length 503;
 Best Local Similarity 61.1%; Pred. No. 5.7;
 Matches 11; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

QY 24 VGSNKGAIIIGLMVGWV 41
 DB 131 VKDNGALIGLLVGGFVL 148

RESULT 15

SLG1 YEAST
 ID SLG1 YEAST STANDARD; PRT; 378 AA.
 AC P54867;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE SLG1 protein precursor.
 GN SLG1 OR YOR008C OR UNF378.
 OS Saccharomyces cerevisiae (Baker's yeast).
 CC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
 OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
 OX NCBI_TaxID=4932;
 RN NCBI_TaxID=4932;
 RP SEQUENCE FROM N.A.
 RA de Bettignies G., Bergez-Aulio P., Barthe C., Louvet O.,
 RA Peydouquet M.F., Morel C., Doignon F., Crouzet M.;
 RL Submitted (OCT-1995) to the EMBL/GenBank/DBSJ databases.
 RN [2].
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97051599; PubMed=8896276;
 RA Sterky F., Holmberg A., Pettersson B., Uhlen M.;
 RT "The sequence of a 30 kb fragment on the left arm of chromosome XV
 RT from Saccharomyces cerevisiae reveals 15 open reading frames, five of
 RT which correspond to previously identified genes.";
 RL Yeast 12:1091-1095 (1996).

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 CC or send an email to license@isb-sib.ch).

CC EMBL; U39481; A285862.1; -;
 DR EMBL; U3491; AAC49488.1; -;
 DR EMBL; Z74916; CAA59196.1; -;
 DR SGD; S0005534; SLG1.
 DR InterPro; IPR002889; WSC.
 DR Pfam; PF01822; WSC; 1.
 DR SMART; SM00321; WSC; 1.
 DR Glycoprotein; Signal.
 FT SIGNAL 1 19 POTENTIAL.
 FT CHAIN 20 378 SLG1 PROTEIN.
 FT CARBOHYD 65 65 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 354 354 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 378 AA; 39270 MW; EEE164F2374CCCE3 CRC64;

Query Match 26.0%; Score 56.5; DB 1; Length 378;
 Best Local Similarity 42.4%; Pred. No. 5;
 Matches 14; Conservative 5; Mismatches 5; Indels 9; Gaps 1;

QY 8 SGYEVHOKLVFFABDVGSNKGAIIIGLMVGWV 40
 DB 251 SGSKTHKK-----ANVGAIVGVGVGV 274

Search completed: April 21, 2003, 12:06:47
 Job time : 14 secs

GenCore version 5.1.4 p5.4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:03:55 ; Search time 28 seconds
(without alignments)
303.071 Million cell updates/sec

Title: US-09-580-018-42

Perfect score: 217

Sequence: 1 DAEFRHDSGYVHHQKLVFF.....DVGSKGAIIGLMVGGVIA 42

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL 21:*
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rhodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriaph:*
17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	82	4 Q16014	Q16014 homo sapien
2	217	100.0	82	4 Q16019	Q16019 homo sapien
3	217	100.0	82	4 Q16020	Q16020 homo sapien
4	217	100.0	82	4 P78438	P78438 homo sapien
5	217	100.0	534	13 Q93296	Q93296 gallus gall
6	217	100.0	569	13 Q9PVL1	Q9PVL1 gallus gall
7	217	100.0	695	6 Q95KN7	Q95KN7 macaca fasc
8	217	100.0	695	11 Q60496	Q60496 cavia sp. p
9	217	100.0	695	13 Q9PGJ8	Q9PGJ8 gallus gall
10	217	100.0	751	13 Q9PGJ7	Q9PGJ7 gallus gall
11	217	100.0	770	6 Q9TU10	Q9TU10 sus scrofa
12	207	95.4	97	4 Q13778	Q13778 homo sapien
13	198	91.2	79	11 Q35463	Q35463 cricetus
14	198	91.2	607	11 Q99K32	Q99K32 mus musculus
15	198	91.2	693	13 Q98SG0	Q98SG0 xenopus lae
16	198	91.2	695	11 P97487	P97487 mus musculus

17	198	91.2	747	13 Q91963	Q91963 xenopus ap
18	195	89.9	695	13 Q98S99	Q98S99 xenopus lae
19	188	86.6	699	13 Q57394	Q57394 narke japon
20	176	81.1	33	4 Q9UC33	Q9UC33 homo sapien
21	175	80.6	780	13 Q73683	Q73683 tetraodon f
22	171	78.8	737	13 Q93279	Q93279 fugu rubrip
23	162	74.7	30	4 Q9UCA9	Q9UCA9 homo sapien
24	157.5	72.6	357	13 Q8UUI8	Q8UUI8 brachydanio
25	157.5	72.6	472	13 Q8UUS0	Q8UUS0 brachydanio
26	157.5	72.6	612	13 Q91987	Q91987 brachydanio
27	157.5	72.6	738	13 Q90W28	Q90W28 brachydanio
28	156	71.9	239	13 Q8UUI7	Q8UUI7 brachydanio
29	156	71.9	694	13 Q8UUC9	Q8UUC9 brachydanio
30	147	67.7	28	4 Q9UCD1	Q9UCD1 homo sapien
31	121	55.8	49	6 Q97917	Q97917 bos taurus
32	106	48.8	19	4 Q9UCC8	Q9UCC8 homo sapien
33	95	43.8	35	4 Q8WZ99	Q8WZ99 homo sapien
34	64	29.5	328	2 Q9RPS4	Q9RPS4 enterococcu
35	63	29.0	321	16 Q8RG41	Q8RG41 fusobacteri
36	63	29.0	755	2 Q9R717	Q9R717 agrobacteri
37	63	29.0	755	2 Q9R472	Q9R472 agrobacteri
38	63	29.0	755	2 Q9R694	Q9R694 agrobacteri
39	63	29.0	755	16 Q8U6A3	Q8U6A3 agrobacteri
40	62	28.6	755	2 Q44388	Q44388 agrobacteri
41	60	27.6	755	2 Q9WMA1	Q9WMA1 agrobacteri
42	59	27.2	20	4 Q9UCB6	Q9UCB6 homo sapien
43	57.5	26.5	895	10 Q9AWB6	Q9AWB6 lycopersaico
44	57	26.3	195	10 Q22662	Q22662 arabidopsals
45	57	26.3	332	12 Q9DQNS	Q9DQNS potato viru

ALIGNMENTS

RESULT 1

Q16014
ID Q16014 PRELIMINARY; PRT; 82 AA.
AC Q16014;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Beta-amyloid peptide (fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93236601; PubMed=8476439;
RA Demnan R.B., Rosenczwaig R., Miller D.L.;
RT "A system for studying the effect(s) of familial Alzheimer disease
mutations on the processing of the beta-amyloid peptide precursor.";
RL Biochem. Biophys. Res. Commun. 192:96-103(1993).
DR EMBL; S60721; AAB26263.2; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF03494; Beta-APP; 1.
FT NON_TER 1
FT NON_TER 82
SQ SEQUENCE 82 AA; 8972 MW; F534AA5B3EA9230A CRC64;

Query Match 100.0%; Score 217; DB 4; Length 82;
Best Local Similarity 100.0%; Pred. No. 1.9e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYVHHQKLVFFAEVDGSKGAIIGLMVGGVIA 42

DB 18 DAEFRHDSGYVHHQKLVFFAEVDGSKGAIIGLMVGGVIA 59

RESULT 2

Q16019
ID Q16019 PRELIMINARY; PRT; 82 AA.

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AC Q16019;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Beta-amyloid peptide (Fragment).
GN BETA APP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93236601; PubMed=8476439;
RA Denman R.B., Rosenczwaig R., Miller D.L.;
RT "A system for studying the effect(s) of familial Alzheimer disease
RT mutations on the processing of the beta-amyloid peptide precursor.";
RL Biochem. Biophys. Res. Commun. 192:96-103(1993).
DR EMBL; S61380; AAB26264.2; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF03494; Beta-APP; 1.
FT NON_TER 1
FT NON_TER 82
FT NON_TER 82
SQ SEQUENCE 82 AA; 8938 MW; F534AA50E579230A CRC64;

Query Match 100.0%; Score 217; DB 4; Length 82;
Best Local Similarity 100.0%; Pred. No. 1.9e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 18 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 59

RESULT 3
ID Q16020
AC Q16020;
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Beta-amyloid peptide (Fragment).
GN BETA APP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93236601; PubMed=8476439;
RA Denman R.B., Rosenczwaig R., Miller D.L.;
RT "A system for studying the effect(s) of familial Alzheimer disease
RT mutations on the processing of the beta-amyloid peptide precursor.";
RL Biochem. Biophys. Res. Commun. 192:96-103(1993).
DR EMBL; S61383; AAB26265.2; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF03494; Beta-APP; 1.
FT NON_TER 1
FT NON_TER 82
FT NON_TER 82
SQ SEQUENCE 82 AA; 8882 MW; F534AA5AE5D9230A CRC64;

Query Match 100.0%; Score 217; DB 4; Length 82;
Best Local Similarity 100.0%; Pred. No. 1.9e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 18 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 59

RESULT 4
P78438

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ID P78438
AC P78438;
DT 01-MAY-1997 (TrEMBLrel. 03, Created)
DT 01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Amyloid protein (Beta-amyloid protein) (Fragment).
GN APP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=89392030; PubMed=2675837;
RA Johnstone E.M., Chaney M.O., Moore R.E., Ward K.E., Norris F.H.,
RA Little S.P.;
RT "Alzheimer's disease amyloid peptide is encoded by two exons and shows
RT similarity to soybean trypsin inhibitor.";
RL Biochem. Biophys. Res. Commun. 163:1248-1255(1989).
RN [2]
RP SEQUENCE OF 19-48 FROM N.A.
RX MEDLINE=87120329; PubMed=2949367;
RA Tanzi R.E., Gusella J.F., Watkins P.C., Bruns G.A., George-Hyslop P.,
RA Van Keuren M.L., Patterson D., Pagan S., Kurnit D.M., Neve R.L.;
RT "Amyloid beta protein gene: cDNA, mRNA distribution, and genetic
RT linkage near the Alzheimer locus.";
RL Science 235:880-884(1987).
RN [3]
RP SEQUENCE OF 32-63 FROM N.A.
RX MEDLINE=93035397; PubMed=1415269;
RA Kamino K., Orr H.T., Payami H., Wijisman E.M., Alonso M.E., Pulst S.M.,
RA Anderson L., Orr H.T., Nemens E., White J.A.;
RT "Linkage and mutational analysis of familial Alzheimer disease
RT kindreds for the APP gene region.";
RL Am. J. Hum. Genet. 51:998-1014(1992).
DR EMBL; M29270; AAA51768.1; -.
DR EMBL; M29269; AAA51768.1; JOINED.
DR EMBL; M15532; AAA51564.1; -.
DR EMBL; S45136; AAB23646.1; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF03494; Beta-APP; 1.
FT NON_TER 1
FT NON_TER 82
FT NON_TER 82
SQ SEQUENCE 82 AA; 8994 MW; 8DA9E42B813A070E CRC64;

Query Match 100.0%; Score 217; DB 4; Length 82;
Best Local Similarity 100.0%; Pred. No. 1.9e-22;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 17 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 58

RESULT 5
ID O93296
AC O93296;
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Amyloid protein (Fragment).
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98337885; PubMed=9671674;
RA Barnes N.Y., Li L., Yoshikawa K., Schwartz L.M., Oppenheim R.W.,
RA Milligan C.E.;
RT "Increased production of amyloid precursor protein provides a

```


RT substrate for caspase-3 in dying motoneurons.";
 RL J. Neurosci. 18:5869-5880(1998).
 DR EMBL; AF042098; AAC25052.1; -.
 DR HSSP; P05067; 1BA4.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 DR PROSITE; PS00319; A4_EXTRA; 1.
 DR PROSITE; PS00320; A4_INTRA; 1.
 FT NON_TER 1_1
 SQ SEQUENCE 534 AA; 60597 MW; FB53ECCE66D4C92 CRC64;
 Query Match 100.0%; Score 217; DB 13; Length 534;
 Best Local Similarity 100.0%; Pred. No. 1.8e-21;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 DB 436 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 477
 RESULT 6
 ID Q9PVL1 PRELIMINARY; PRT; 569 AA.
 AC Q9PVL1
 DT 01-MAY-2000 (T-EMBLrel. 13, Created)
 DT 01-MAY-2000 (T-EMBLrel. 13, Last sequence update)
 DT 01-JUN-2002 (T-EMBLrel. 21, Last annotation update)
 DE Amyloid protein (Fragment).
 GN APP.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=BRAIN;
 RA Coulson E.J., Paliaga K., Beyreuther K., Masters C.L.;
 RT "What the evolution of the amyloid protein precursor supergene family
 RT tells us about its function.";
 RL Neurochem. Int. 0:0-0(2000).
 DR EMBL; AF030341; AAF12698.1; -.
 DR HSSP; P05067; 1BA4.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 DR SMART; SM00006; A4_EXTRA; 1.
 DR PROSITE; PS00319; A4_EXTRA; 1.
 DR PROSITE; PS00320; A4_INTRA; 1.
 FT NON_TER 1_1
 SQ SEQUENCE 569 AA; 64753 MW; 0AB8B851863A19D CRC64;
 Query Match 100.0%; Score 217; DB 13; Length 569;
 Best Local Similarity 100.0%; Pred. No. 1.9e-21;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 DB 472 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 513
 RESULT 7
 ID Q95KN7 PRELIMINARY; PRT; 695 AA.
 AC Q95KN7
 DT 01-DEC-2001 (T-EMBLrel. 19, Created)
 DT 01-DEC-2001 (T-EMBLrel. 19, Last sequence update)
 DT 01-JUN-2002 (T-EMBLrel. 21, Last annotation update)

DE Amyloid b-protein precursor.
 OS Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Macaca.
 OX NCBI_TaxID=9541;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=CEREBELLUM;
 RX MEDLINE=91273117; PubMed=1905108;
 RA Podlasky M.B., Tolan D.R., Selkoe D.J.;
 RT "Homology of the amyloid beta protein precursor in monkey and human
 RT supports a primate model for beta amyloidosis in Alzheimer's
 RT disease.";
 RL Am. J. Pathol. 138:1423-1435(1991).
 DR EMBL; M58727; AAA36829.1; -.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PROSITE; PS00319; A4_EXTRA; UNKNOWN_1.
 DR PROSITE; PS00320; A4_INTRA; UNKNOWN_1.
 FT SIGNAL 1
 FT CHAIN 597 636 POTENTIAL.
 SQ SEQUENCE 695 AA; 78663 MW; 4F6EA0139F969D56 CRC64;
 Query Match 100.0%; Score 217; DB 6; Length 695;
 Best Local Similarity 100.0%; Pred. No. 2.4e-21;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 DB 597 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 638
 RESULT 8
 ID Q60496 PRELIMINARY; PRT; 695 AA.
 AC Q60496
 DT 01-NOV-1996 (T-EMBLrel. 01, Created)
 DT 01-NOV-1996 (T-EMBLrel. 01, Last sequence update)
 DT 01-JUN-2002 (T-EMBLrel. 21, Last annotation update)
 DE Putative amyloid precursor protein.
 OS Cavia sp.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
 OX NCBI_TaxID=10143;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=BRAIN;
 RX MEDLINE=97236426; PubMed=9116031;
 RA Beck M., Mueller D., Bigl V.;
 RT "Amyloid precursor protein in Guinea pigs - complete cDNA sequence and
 RT alternative splicing.";
 RL Biochim. Biophys. Acta 1351:17-21(1997).
 DR EMBL; X97631; CAA6230.1; -.
 DR HSSP; P05067; 1BA4.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 DR SMART; SM00006; A4_EXTRA; 1.
 DR PROSITE; PS00319; A4_EXTRA; 1.
 DR PROSITE; PS00320; A4_INTRA; 1.
 SQ SEQUENCE 695 AA; 78701 MW; 5196A0C4017F16AB CRC64;
 Query Match 100.0%; Score 217; DB 11; Length 695;
 Best Local Similarity 100.0%; Pred. No. 2.4e-21;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 42
 DB 597 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVIA 638

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Db 597 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 638

RESULT 9
Q9DQJ8 PRELIMINARY; PRT; 695 AA.
ID Q9DQJ8
AC Q9DQJ8
DT 01-MAR-2001 (TrEMBLrel. 16, Created)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Beta-amyloid precursor protein 695 isoform.
OS Gallus gallus (Chicken)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus
OX NCBI_TaxID=9031;
RV [1]_TaxID=9031;
RP SEQUENCE FROM N.A.
RA Sarasa M., Rodolasse A., Sorribas V.;
RT "Cloning of full-length chicken beta-amyloid precursor protein
RT isoforms.";
RL Submitted (JUL-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF289218; AAG00593.1; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001868; A4_APP.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF02177; A4_EXTRA; 1.
DR Pfam; PF03494; Beta-APP; 1.
DR PRINTS; PR00203; AMYLOIDA4.
DR SMART; SM00006; A4_EXTRA; 1.
DR PROSITE; PS00319; A4_APP; 1.
DR PROSITE; PS00320; A4_INTRA; 1.
DR PROSITE; PS00320; A4_INTRA; 1.
SQ SEQUENCE 695 AA; 78565 MW; P201ED02ASC86D95 CRC64;

Query Match 100.0%; Score 217; DB 13; Length 695;
Best Local Similarity 100.0%; Pred. No. 2.4e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 597 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 638

RESULT 10
Q9DQJ7 PRELIMINARY; PRT; 751 AA.
ID Q9DQJ7
AC Q9DQJ7
DT 01-MAR-2001 (TrEMBLrel. 16, Created)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Beta-amyloid precursor protein 751 isoform.
OS Gallus gallus (Chicken)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus
OX NCBI_TaxID=9031;
RV [1]_TaxID=9031;
RP SEQUENCE FROM N.A.
RA Sarasa M., Rodolasse A., Sorribas V.;
RT "Cloning of full-length chicken beta-amyloid precursor protein
RT isoforms.";
RL Submitted (JUL-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF289219; AAG00594.1; -.
DR HSSP; P05067; 1BA4.
DR InterPro; IPR001868; A4_APP.
DR InterPro; IPR001255; Beta-APP.
DR Pfam; PF02177; A4_EXTRA; 1.
DR Pfam; PF03494; Beta-APP; 1.
DR PRINTS; PR00203; AMYLOIDA4.
DR PRINTS; PR00753; BASICPTASE.
DR PRODOM; PD000222; Kunitz_BPTI; 1.

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DR SMART; SM00006; A4_EXTRA; 1.
DR SMART; SM00131; KU; 1.
DR PROSITE; PS00319; A4_EXTRA; 1.
DR PROSITE; PS00320; A4_INTRA; 1.
DR PROSITE; PS00280; BPTI_KUNITZ_1; 1.
DR PROSITE; PS00279; BPTI_KUNITZ_2; 1.
KW Serine protease inhibitor.
SQ SEQUENCE 751 AA; 84705 MW; E78E9413A8033D84 CRC64;

Query Match 100.0%; Score 217; DB 13; Length 751;
Best Local Similarity 100.0%; Pred. No. 2.7e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 653 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 694

RESULT 11
Q9TU10 PRELIMINARY; PRT; 770 AA.
ID Q9TU10
AC Q9TU10
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Amyloid precursor protein.
OS Sus scrofa (Pig)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RV [1]_TaxID=9823;
RP SEQUENCE FROM N.A.
RA Kimura A., Takahashi T.;
RT "Amyloid Precursor Protein 770.";
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB032550; BAA94580.1; -.
DR HSSP; P05067; 1AAP.
DR InterPro; IPR001868; A4_APP.
DR InterPro; IPR001255; Beta-APP.
DR InterPro; IPR002223; Kunitz_BPTI.
DR Pfam; PF02177; A4_EXTRA; 1.
DR Pfam; PF03494; Beta-APP; 1.
DR Pfam; PF00014; Kunitz_BPTI; 1.
DR PRINTS; PR00203; AMYLOIDA4.
DR PRINTS; PR00753; BASICPTASE.
DR PRODOM; PD000222; Kunitz_BPTI; 1.
DR SMART; SM00006; A4_EXTRA; 1.
DR SMART; SM00131; KU; 1.
DR PROSITE; PS00319; A4_EXTRA; 1.
DR PROSITE; PS00320; A4_INTRA; 1.
DR PROSITE; PS00280; BPTI_KUNITZ_1; 1.
DR PROSITE; PS00279; BPTI_KUNITZ_2; 1.
KW Serine protease inhibitor.
SQ SEQUENCE 770 AA; 86961 MW; 5F7A1DCB2BCC583E CRC64;

Query Match 100.0%; Score 217; DB 6; Length 770;
Best Local Similarity 100.0%; Pred. No. 2.7e-21;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
DB 672 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 713

RESULT 12
Q13778 PRELIMINARY; PRT; 97 AA.
ID Q13778
AC Q13778
DT 01-NOV-1996 (TrEMBLrel. 01, Created)
DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DE Amyloid protein (AD-AP) (fragment).
OS Homo sapiens (Human).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN (1)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=87120328; PubMed=3810169;
 RA Goldhaber D., Herman M.I., McBride O.W., Saffioti U., Gaidusek D.C.;
 RI "Characterization and chromosomal localization of a cDNA encoding
 brain amyloid of Alzheimer's disease.";
 RL Science 235:877-880(1987).
 DR EMBL; M15533; AAA35540.1; -.
 DR HSSP; P05067; 1BA4.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 FT NON TER 1
 SQ SEQUENCE 97 AA; 10884 MW; E528CDB448DE474E CRC64;
 Query Match 95.4%; Score 207; DB 4; Length 97;
 Best Local Similarity 100.0%; Pred. No. 5.5e-21; Length 97;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3 EFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 42
 DB 1 EFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 40
 RESULT 13
 Q35463 PRELIMINARY; PRT; 79 AA.
 AC Q35463;
 DT 01-JAN-1998 (TrEMBLrel. 05, Created)
 DT 01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
 DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
 DE Alzheimer's amyloid beta protein (Fragment).
 GN BETA APP.
 OS Cricetus griseus (Chinese hamster).
 OC Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
 OC Cricetulus.
 OX NCBI_TaxID=10029;
 RN (1)
 RP SEQUENCE FROM N.A.
 RA Sambamurti K., Pinnix I., Gandhi S.;
 RL Submitted (OCT-1997) to the EMBL/GenBank/DBSJ databases.
 DR EMBL; AF030413; BAB86608.1; -.
 DR HSSP; P05067; 1BA4.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF03494; Beta-APP; 1.
 FT NON TER 1
 SQ SEQUENCE 79 AA; 8538 MW; 372C6C3BFF3F597 CRC64;
 Query Match 91.2%; Score 198; DB 11; Length 79;
 Best Local Similarity 92.9%; Pred. No. 7.6e-20;
 Matches 39; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 42
 DB 21 DAEFGHDSGFVHRHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 62
 RESULT 14
 Q99K32 PRELIMINARY; PRT; 607 AA.
 ID Q99K32;
 DT 01-JUN-2001 (TrEMBLrel. 17, Created)
 DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
 DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
 DE Hypothetical 68.4 kDa protein (Fragment).
 OS Mus musculus (Mouse).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 OX NCBI_TaxID=10090;
 RN (1)
 RP SEQUENCE FROM N.A.
 RA Strausberg R.;
 RL Submitted (MAR-2001) to the EMBL/GenBank/DBSJ databases.
 DR EMBL; BC005490; AA05490.1; -.
 DR HSSP; P05067; 1AAP.
 DR MGD; MGI:88059; App.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR Pfam; PF00014; Kunitz BPTI; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 DR PRINTS; PR00759; BASICPTASE.
 DR ProDom; PD000222; Kunitz BPTI; 1.
 DR SMART; SM00131; KU; 1.
 DR PROSITE; PS00319; A4_EXTRA; 1.
 DR PROSITE; PS00320; A4_INTRA; 1.
 DR PROSITE; PS00280; BPTI_KUNITZ_1; 1.
 DR PROSITE; PS0279; BPTI_KUNITZ_2; 1.
 KW Hypothetical protein; Serine protease inhibitor.
 FT NON TER 1
 SQ SEQUENCE 607 AA; 68391 MW; BF802214CBA7D172 CRC64;
 Query Match 91.2%; Score 198; DB 11; Length 607;
 Best Local Similarity 92.9%; Pred. No. 8.8e-19;
 Matches 39; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 42
 DB 509 DAEFGHDSGFVHRHOKLVFFAEDVGSNGKAIIGLMVGGVVIA 550
 RESULT 15
 Q98SG0 PRELIMINARY; PRT; 693 AA.
 ID Q98SG0;
 AC Q98SG0;
 DT 01-JUN-2001 (TrEMBLrel. 17, Created)
 DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
 DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
 DE Beta-amyloid precursor protein A.
 GN APP.
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidea; Pipidae;
 OC Xenopodinae; Xenopus.
 OX NCBI_TaxID=8355;
 RN (1)
 RP SEQUENCE FROM N.A.
 RA Van den Hurk W.H.;
 RL Thesis (2001), Department of Biological Sciences,
 University of Nijmegen, Nijmegen, Netherlands.
 DR EMBL; AJ2298150; CAC37193.1; -.
 DR HSSP; P05067; 1HZ3.
 DR InterPro; IPR001868; A4_APP.
 DR InterPro; IPR001255; Beta-APP.
 DR Pfam; PF02177; A4_EXTRA; 1.
 DR Pfam; PF03494; Beta-APP; 1.
 DR PRINTS; PR00203; AMYLOIDA4.
 DR SMART; SM00006; A4_EXTRA; 1.
 DR PROSITE; PS00319; A4_EXTRA; 1.
 DR PROSITE; PS00320; A4_INTRA; 1.
 KW Signal.
 FT SIGNAL.
 SQ SEQUENCE 693 AA; 78568 MW; CAF1DF655C1AB653 CRC64;
 Query Match 91.2%; Score 198; DB 13; Length 693;
 Best Local Similarity 88.1%; Pred. No. 1e-18; 1; Indels 0; Gaps 0;
 Matches 37; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

GenCore version 5.1.4 p5 4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 11:57:04 ; Search time 36 Seconds
(without alignments)

155.459 Million cell updates/sec

Title: US-09-580-018-42

Perfect score: 217

Sequence: 1 DAEFRHDSGYEYHVKLVFF.....DVGSNGAIIIGLVGVVIA 42

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A Geneseq 101002.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	217	100.0	42	13 AAR20330	Sequence of A99 (b
2	217	100.0	42	15 AAR60366	Beta-amyloid (1-42
3	217	100.0	42	17 AAR95248	Beta/A4-amyloid pe
4	217	100.0	42	17 AAR94591	Alzheimer amyloid
5	217	100.0	42	18 AA12828	Beta A4 peptide
6	217	100.0	42	19 AAW4507	Neurotoxic beta-am
7	217	100.0	42	19 AAW47230	Beta-amyloid pepti
8	217	100.0	42	19 AAW42989	Full length beta-a
9	217	100.0	42	20 AAY49691	Human beta amyloid
10	217	100.0	42	20 AAY33407	Human amyloidogeni

11	217	100.0	42	20 AAY25137	Human amyloid beta
12	217	100.0	42	20 AAY08607	Human beta-amyloid
13	217	100.0	42	20 AAW29093	A-beta-binding pep
14	217	100.0	42	20 AAW95585	Mutant aggregating
15	217	100.0	42	20 AAW92726	Human tachykinin a
16	217	100.0	42	20 AAW81474	Synthetic amyloid
17	217	100.0	42	21 AAY96956	Beta-amyloid 1-42
18	217	100.0	42	22 AAB82622	Amyloid-beta pepti
19	217	100.0	42	22 AAE05484	Human Alzheimer-be
20	217	100.0	42	22 AAB86134	Human Alzheimer-be
21	217	100.0	42	22 AAB91779	Amyloid beta-prote
22	217	100.0	42	22 AAB91812	Amyloid beta-prote
23	217	100.0	42	22 AAB49098	Human amyloid beta
24	217	100.0	42	22 AAB48497	Human amyloid prot
25	217	100.0	42	22 AAB48830	Human amyloid-beta
26	217	100.0	42	22 AAB49395	Human amyloid pept
27	217	100.0	42	22 AAB35589	Beta/A4-amyloid pe
28	217	100.0	42	23 AAU98727	Human amyloid beta
29	217	100.0	42	23 ABB83306	Amyloid-beta (Abet
30	217	100.0	42	23 AAU96896	Human Amyloid beta
31	217	100.0	42	23 ABB81321	Amyloid precursor
32	217	100.0	42	23 AAE21438	Human beta-amyloid
33	217	100.0	42	23 ABB76029	Beta amyloid pepti
34	217	100.0	42	23 AAU93988	Human beta-amyloid
35	217	100.0	42	23 AAU76483	Amino acids 1-42 o
36	217	100.0	42	23 AAU80961	Human amyloid beta
37	217	100.0	42	23 AAG68314	Human beta amyloid
38	217	100.0	42	23 AAM51864	Neuronal death inh
39	217	100.0	42	23 AAU75433	Amyloid peptide pr
40	217	100.0	43	10 AAP96371	Region of pre-APC
41	217	100.0	43	15 AAR54759	Beta amyloid pepti
42	217	100.0	43	15 AAR60357	Beta-amyloid (1-43
43	217	100.0	43	15 AAR61328	Amyloid beta-prote
44	217	100.0	43	16 AAR64185	Beta amyloid prote
45	217	100.0	43	17 AAR95673	A-beta protein (43

ALIGNMENTS

RESULT 1

AAR20330
ID AAR20330 standard; peptide; 42 AA.

XX AAR20330;

AC AAR20330;

DT 14-APR-1992 (first entry)

DE Sequence of A99 (beta-amyloid core domain).

XX Transgenic mice; Alzheimer's disease; diagnosis;

KW beta-amyloid precursor; plaque core protein.

XX Homo sapiens.

XX WO9119810-A.

XX 26-DEC-1991.

PF 17-JUN-1991; 91WO-US04447.

XX 15-JUN-1990; 90US-0538857.

XX (CALB-) CALIF BIOTECHN INC.

XX Cordell B;

XX WPI; 1992-024426/03.

PT Transgenic mice as models for studying Alzheimer's disease

PT proteins - congl. cells with promoter and beta-amyloid precursor

PT protein deoxyribonucleic acid, useful for testing

PT anti-alzheimer's drugs

XX PS Disclosure; Fig 3; 98pp; English.

CC The inventors specifically claim transgenic mice contg. DNA encoding

CC A42 (beta-amyloid precursor protein) (AAR20330), A99 (beta-amyloid

CC carboxy tail) (AAR20329), A695 (beta-amyloid precursor protein), A751

CC (precursor plus inhibitor) or A41 (protease inhibitor) (AAR20328).

CC Human fibroblast cDNA clone lambdaAPCP16814 was deposited at ATCC on

CC July 1, 1987 and has accession No. 40347. The promoter is pref. the

CC NSE promoter with the A751 or the A695 sequence.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 13; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

RESULT 2

AAR60366

ID AAR60366 standard; peptide; 42 AA.

AC AAR60366;

XX 15-MAR-1995 (first entry)

XX Beta-amyloid (1-42).

DE Amyloid precursor protein; APP; Alzheimer's disease; beta-amyloid;

KW anti-beta-amyloid antibody; diagnosis.

XX Homo sapiens.

OS WO9417197-A.

XX 04-AUG-1994.

XX 24-JAN-1994; 94WO-JP00089.

XX 25-JAN-1993; 93JP-0010132.

PR 05-FEB-1993; 93JP-0019035.

PR 16-NOV-1993; 93JP-0286985.

PR 28-DEC-1993; 93JP-0334773.

XX (TAKE) TAKEDA CHEM IND LTD.

XX Kitada C, Odaka A, Suzuki N;

XX WPI; 1994-264110/32.

XX Antibodies recognising specific parts of beta-amyloid - can be

PT used for diagnosis of diseases implicating beta-amyloid, such as

PT Alzheimer's disease

XX Disclosure; Page 83; 116pp; Japanese.

XX Antibodies which recognise specific subfragments of the beta-amyloid

CC protein are claimed. Specifically, the antibodies (which are pref.

CC monoclonal) recognise residues 1-16 and/or 1-28 from the N-terminal

CC portion of beta-amyloid or they recognise residues 25-35 or 35-43

CC from the C-terminal portion. The antibodies are useful for assaying

CC beta-amyloid and its derivatives for diagnosis of Alzheimer's

CC disease.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 15; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX PS Disclosure; Fig 3; 98pp; English.

CC The inventors specifically claim transgenic mice contg. DNA encoding

CC A42 (beta-amyloid precursor protein) (AAR20330), A99 (beta-amyloid

CC carboxy tail) (AAR20329), A695 (beta-amyloid precursor protein), A751

CC (precursor plus inhibitor) or A41 (protease inhibitor) (AAR20328).

CC Human fibroblast cDNA clone lambdaAPCP16814 was deposited at ATCC on

CC July 1, 1987 and has accession No. 40347. The promoter is pref. the

CC NSE promoter with the A751 or the A695 sequence.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 17; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

RESULT 3

AAR95248

ID AAR95248 standard; peptide; 42 AA.

AC AAR95248;

XX 20-JAN-1997 (first entry)

XX Beta/A4-amyloid peptide.

XX Beta/A4-amyloid peptide; tissue plasminogen activator;

KW Alzheimer's disease; stimulation; investigation; pathogenesis;

KW hereditary cerebral haemorrhage with amyloidosis-Dutch type;

KW control; cerebral amyloid angiopathy; cerebral; haemorrhage;

XX Homo sapiens.

OS WO9615799-A1.

XX 30-MAY-1996.

XX 22-NOV-1995; 95WO-US15007.

XX 22-NOV-1994; 94US-0347144.

XX (RUTF) UNIV RUTGERS STATE NEW JERSEY.

XX Anderson S;

XX WPI; 1996-268332/27.

XX Use of agents which bind beta-amyloid peptide - for diagnosis,

PT prevention and treatment of vascular damage caused by amyloid

PT deposits, partic. in haemorrhaging and Alzheimer's disease

XX Example 1; Fig 1; 52pp; English.

XX To investigate the effects of beta-amyloid peptide (BAP) on

CC tissue plasminogen activator (t-PA) 3 synthetic peptides were used.

CC One peptide contained 42 amino acids and corresp. to the full

CC length BAP (AAR95248). The other 2 peptides (AAR95249 and 50) contained

CC the 28 N-terminal residues of the BAP found in Alzheimer's disease

CC and hereditary cerebral haemorrhage with amyloidosis-Dutch type

CC (HCHWA-D), respectively. In an assay to determine the effect of

CC the peptides on t-PA activation, each peptide (AAR95248, 49 and 50)

CC gave 1st order rate constant of activation (k_{app}) values of

CC 13.4, 13.9 and 14.5, respectively, compared to 1.7 and 7.8 for null

CC and fibrinogen controls. The results demonstrate that the BAP are

CC able to stimulate t-PA activity in vitro, which is significant in

CC that it provides a means for investigating and controlling the

CC pathogenesis of Alzheimer's disease, HCHWA-D and cerebral amyloid

CC angiopathy related cerebral haemorrhage.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 17; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHOKLVFFAEDVGSNGKGAIIIGLMVGGVVIA 42

RESULT 4

AAR94591

ID AAR94591 standard; peptide; 42 AA.
 XX
 AC AAR94591;
 XX
 DT 21-AUG-1996 (first entry)
 XX
 DE Alzheimer amyloid beta-protein active site sequence.
 XX
 KW Beta-amyloid; Alzheimer's disease; cholinesterase; lipase; ebelactone-A;
 KW serine protease; para-amidinophenylmethanesulphonyl fluoride; inhibition;
 KW complex formation; alpha(1)-antichymotrypsin; Down's disease; ageing.
 XX
 OS Synthetic.
 XX
 PN US5506097-A.
 XX
 PD 09-APR-1996.
 XX
 PF 24-AUG-1990; 90US-0572671.
 XX
 PR 10-JAN-1994; 94US-0179574.
 PR 24-AUG-1990; 90US-0572671.
 PR 13-JAN-1992; 92US-0819361.
 PR 13-JAN-1993; 93WO-US00325.
 XX
 PA (HARD) HARVARD COLLEGE.
 XX
 PI Kayyali U, Potter H;
 XX
 DR WPI; 1996-200270/20.
 XX
 PT Inhibiting enzymatic activity of Alzheimer amyloid beta-protein -
 PT using p-amidino:phenylmethanesulphonyl fluoride or ebelactone A,
 PT for treatment, study and diagnosis of Alzheimer's disease, etc.
 XX
 PS Disclosure; Fig 1; 17pp; English.
 XX
 CC This is the sequence of a fragment of the beta-amyloid protein
 CC associated with Alzheimer's disease. The protein contains esterase
 CC (cholinesterase and lipase) activities based on active site similarities
 CC with serine proteases (see AAR94592-96). The esterase activity of the
 CC beta-amyloid protein is inhibited by the cpds. of the invention i.e.
 CC ebelactone A or para-amidinophenylmethanesulphonyl fluoride. Inhibition
 CC of these activities prevent complex formation between the beta-amyloid
 CC protein and alpha(1)-antichymotrypsin, thus can be used to treat, study
 CC or diagnose Alzheimer's or Down's diseases or normal ageing.
 XX
 SQ Sequence 42 AA;
 Query Match 100.0%; Score 217; DB 17; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 DAEFRHDSGYEVHQLVFFAEADVGSNKGAIIGLMVGGVVIA 42
 DB 1 DAEFRHDSGYEVHQLVFFAEADVGSNKGAIIGLMVGGVVIA 42
 RESULT 5
 AAW12828
 ID AAW12828 standard; peptide; 42 AA.
 XX
 AC AAW12828;
 XX
 DT 08-DEC-1997 (first entry)
 XX
 DE Beta A4 peptide.
 XX
 KW Beta A4 peptide; Alzheimer's disease; peptide aggregation; brain;
 KW therapy; inhibitor.
 XX
 OS Homo sapiens.
 XX

PN WO9707403-A1.
 XX
 PD 27-FEB-1997.
 XX
 PF 23-JUL-1996; 96WO-US12034.
 XX
 PR 16-AUG-1995; 95US-0515606.
 XX
 PA (HMRI) HOECHST MARION ROUSSEL INC.
 XX
 PI Goyal S, Paul JW, Riedel NG, Sahasrabudhe SR;
 XX
 DR WPI; 1997-165447/15.
 XX
 PT Determn. of the degree of betaA4 peptide aggregation using binding
 PT agent - used to screen cpds. for possible use in Alzheimer's disease
 PT treatment
 XX
 PS Disclosure; Page 10; 18pp; English.
 XX
 CC This sequence represents the beta A4 peptide. The degree of aggregation
 CC of this peptide is determined using the method of the invention. The beta
 CC A4 peptide is present in the brain of Alzheimer's disease patients, but
 CC not in the brain of non-Alzheimer's disease individuals. The peptide
 CC clumps or aggregates in the brain of Alzheimer's disease patients, where
 CC it may be responsible for the destruction of normal brain cells. Once the
 CC clumps or aggregates form, the formulation is almost irreversible. The
 CC method of the invention comprises reacting this sequence with a binding
 CC reagent capable of binding to it only in its non-aggregated state, to
 CC form an amount of a beta A4 peptide-bound reagent and an amount of
 CC protein free reagent. The amount of the beta A4 peptide, binding reagent
 CC complex is then measured. Compounds which inhibit aggregation of beta A4
 CC peptide are potentially useful for treatment of Alzheimer's disease.
 XX
 SQ Sequence 42 AA;
 Query Match 100.0%; Score 217; DB 18; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 DAEFRHDSGYEVHQLVFFAEADVGSNKGAIIGLMVGGVVIA 42
 DB 1 DAEFRHDSGYEVHQLVFFAEADVGSNKGAIIGLMVGGVVIA 42
 RESULT 6
 AAW64507
 ID AAW64507 standard; peptide; 42 AA.
 XX
 AC AAW64507;
 XX
 DT 20-OCT-1998 (first entry)
 XX
 DE Neurotoxic beta-amyloid peptide decoy peptide #20.
 XX
 KW Beta-amyloid peptide; beta-AP; neuropeptide; neurotoxin; calcium influx;
 KW aggregate; Alzheimers disease; decoy; treatment.
 XX
 OS Synthetic.
 XX
 PN WO9830229-A1.
 XX
 PD 16-JUL-1998.
 XX
 PF 09-JAN-1998; 98WO-US00653.
 XX
 PR 29-OCT-1997; 97US-0960188.
 PR 10-JAN-1997; 97US-0035847.
 XX
 PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
 XX
 PI Blanchard BJ, Ingram VN;
 XX

DR WPI; 1998-398795/34.
 XX Inhibition of aggregation of, e.g. beta-amyloid peptide - by
 PT administering decoy peptide or other calcium-influx inhibitor,
 PT useful for, e.g. treating Alzheimer's disease
 XX
 PS Example 8; Page 46; 68pp; English.
 XX
 CC AAW64488-W64517 are decoy peptides that bind to a neurotoxic
 CC beta-amyloid peptide (beta-AP) and reduces the ability of beta-AP's to
 CC form aggregates that increase calcium influx into neuronal cells. Such
 CC peptides can be used in the treatment of diseases associated with
 CC neurotoxic aggregates of beta-AP specifically Alzheimer's disease. The
 CC peptides are administered at 0.001-1000 (especially 0.2-20) mg/kg, by
 CC injection and orally, or from slow-release implants.
 XX
 SQ Sequence 42 AA;
 Query Match 100.0%; Score 217; DB 19; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 RESULT 7
 ID AAW47230 standard; peptide; 42 AA.
 AC AAW47230;
 XX
 XX 22-MAY-1998 (first entry)
 DE Beta-amyloid peptide residues 1-42.
 XX Screening assay; beta-amyloid peptide; treatment;
 KW amyloidosis disease; Alzheimer's disease.
 XX Homo sapiens.
 OS
 XX US57211106-A.
 XX 24-FEB-1998.
 XX 12-SEP-1994; 94US-0304585.
 XX 12-SEP-1994; 94US-0304585.
 XX 13-AUG-1991; 91US-0744767.
 XX (HARD) HARVARD COLLEGE.
 XX (MINU) UNIV MINNESOTA.
 XX Maggio JE, Mantyh PW;
 XX WPI; 1998-168404/15.
 XX
 XX New in vitro screening assay for Alzheimer's disease drugs -
 PT comprises assessing binding of labelled beta-amyloid peptide to silk
 PT sample
 XX
 PS Claim 8; Columns 29-30; 36pp; English.
 XX
 CC The present sequence was used in the development of a novel in
 CC vitro screening assay for agents capable of affecting the
 CC deposition of beta-amyloid peptide (BAP) on tissue. The method
 CC comprises contacting a silk sample with labelled BAP, optionally
 CC in the presence of a test agent, detecting the amount of label
 CC bound to the silk and assessing the effect of the agent on the
 CC deposition of BAP. Agents that inhibit binding of BAP to silk are
 CC potentially useful for treating amyloidosis diseases, especially
 CC Alzheimer's disease.

XX SQ Sequence 42 AA;
 Query Match 100.0%; Score 217; DB 19; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 RESULT 8
 ID AAW42989 standard; peptide; 42 AA.
 XX AAW42989;
 XX 01-MAY-1998 (first entry)
 XX Full length beta-amyloid peptide (BAP).
 DE
 XX Beta-amyloid peptide; BAP; extracellular BAP plaque;
 KW cerebrovascular deposit; Alzheimers disease; Downs syndrome;
 KW amyloid precursor protein; APP; secretase; BAP aggregation;
 KW abnormal proteolytic cleavage.
 XX Homo sapiens.
 OS
 XX US5703209-A.
 XX 30-DEC-1997.
 XX 05-JUN-1995; 95US-0464248.
 XX 20-SEP-1993; 93US-0123659.
 XX 01-MAY-1992; 92US-0877675.
 XX (AMCY) AMERICAN CYANAMID CO.
 XX Jacobsen JS, Vitek MP;
 XX WPI; 1998-076482/07.
 XX Amyloid precursor protein fusion polypeptides - comprising APP
 PT fragment and marker, useful for research and drug screening
 XX
 PS Disclosure; Column 7; 84pp; English.
 XX
 CC The present sequence represents a beta-amyloid peptide (BAP). Abnormal
 CC accumulation of extracellular BAP in plaques and cerebrovascular deposits
 CC is characteristic in brains of individuals suffering from Alzheimers
 CC disease and Downs syndrome. BAP is a poorly soluble, self-aggregating
 CC protein which is derived from a larger amyloid precursor protein (APP).
 CC APP is expressed as an integral membrane protein, and is cleaved by
 CC secretase, between BAP 161ys and 171Leu. Cleavage at this site precludes
 CC amyloidogenesis and results in the release of the amino-terminal APP
 CC fragment. Three major isoforms of APP exist: APP-695, APP-751 and
 CC APP-770. These isoforms are derived by alternative splicing. APP-APP 751
 CC is a deletion construct of APP-751, which has a deletion of 276 amino
 CC acids to within 15 amino acids of the BAP-domain. APP can be used as a
 CC substrate for studying abnormal proteolytic cleavage which results in the
 CC release of BAP, and also to screen for drugs that will inhibit such
 CC cleavage.
 XX SQ Sequence 42 AA;
 Query Match 100.0%; Score 217; DB 19; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 9

AA49691
ID AAY49691 standard; peptide; 42 AA.

AC AAY49691;

XX 13-JAN-2000 (first entry)

DT Human beta amyloid precursor protein peptide.

XX Human; beta amyloid precursor protein; APP; beta secretase inhibition;
KW alpha secretase; neurological disorder; Alzheimer's disease;
KW Down's syndrome; mutation.

XX Homo sapiens.

OS WO9951752-A1.

PN 14-OCT-1999.

XX 31-MAR-1999; 99WO-JP01701.

PF 31-MAR-1998; 98JP-0101821.

XX (CHUS) CHUGAI SEIYAKU KK.

PA Ozawa K, Ikeda S, Tabira T;

PI WPI; 1999-620208/53.

XX A cell line which produces beta amyloid precursor protein, used in the
PT investigation of neurological disorders such as Alzheimer's disease -

PS Disclosure; Page 41; 70pp; Japanese.

XX The present invention describes a cell line which produces beta amyloid
CC precursor protein (APP) and expresses alpha secretase activity but
CC expresses beta secretase activity only under an external stimulus
CC Also described is a cloning method for DNA encoding beta secretase,
CC comprising: (1) inserting a DNA library into the cell line, expressing
CC the inserted DNA, and selecting cells expressing beta secretase then
CC isolating the beta secretase DNA from them; or (2) isolating nucleic
CC acid from the cell line with or without external stimulation and
CC performing subtractive cloning to identify DNA expressed only under
CC stimulation. Products from the present invention may be used in the
CC investigation of neurological disorders such as Alzheimer's disease
CC and Down's syndrome and in particular the association of mutations of
CC the beta APP with them. The present sequence represents a human
CC beta APP peptide.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 10

AA49691
ID AAY33407 standard; peptide; 42 AA.

AC AAY33407;

XX 03-DEC-1999 (first entry)

DT Human amyloidogenic A-beta peptide 1.

XX Amyloidogenic; beta-amyloid; A-beta peptide; human; inhibitor;
KW fibrillogenesis; amyloid plaque; amyloidosis; Alzheimer's disease;
KW Down's Syndrome.

OS Homo sapiens.

XX WO9941279-A2.

XX 19-AUG-1999.

XX 12-FEB-1999; 99WO-US03231.

XX 13-FEB-1998; 98US-0074658.

XX (ARCH-) ARCH DEV CORP.

XX Lynn DG, Meredith SC, Burkoth TS;

XX WPI; 1999-561326/47.

XX Inhibiting amyloid plaque formation in humans suffering from
PT amyloidosis, Alzheimer's disease or Down's Syndrome -

XX Claim 21; Page 140; 141pp; English.

XX This invention describes a novel method for inhibiting amyloid
CC fibrillogenesis which comprises contacting tissue with a composition
CC comprising an amyloidogenic peptide, beta-amyloid, that has been blocked
CC at an end terminal or a side chain, by conjugation to polyethylene
CC glycol, by conjugation to a second compound and a pharmaceutically
CC acceptable buffer, solvent or diluent. The methods are used to inhibit
CC amyloid plaque formation in humans suffering from amyloidosis.
CC Alzheimer's disease or Down's Syndrome. This sequence represents a
CC fragment of the beta-amyloid peptide described in the method of the
CC invention.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;

Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 11

AA49691
ID AAY25137 standard; peptide; 42 AA.

AC AAY25137;

XX 26-AUG-1999 (first entry)

DT Human amyloid beta-A4 peptide 5.

XX Amyloid protein; beta-A4 peptide; aggregation; screening; inhibition;
KW therapeutic drug; brain; Alzheimer's disease.

OS Homo sapiens.

XX US5919631-A.

XX 06-JUL-1999.

XX 17-JUL-1996; 96US-0682245.

XX 17-JUL-1996; 96US-0682245.

XX (HMRI) HOECHST MARION ROUSSEL INC.

PI Goyal S, Paul JW, Riedel NG, Sahasrabudhe SR;
 XX WPI; 1999-403957/34.

PT Determination of degree of aggregation of a peptide, useful for
 XX identifying therapeutic drugs for treating Alzheimer's disease

PS Claim 1; Column 7-8; 8pp; English.

XX This invention describes a novel method for the determination of the
 CC degree of aggregation of an amyloid beta A4 peptide (I) in solution.
 CC Determination comprises: (a) incubating a sample of unaggregated
 CC (I) with Coomassie Brilliant Blue G 250 dye (II) which only binds to
 CC unaggregated (I); (b) measuring the amount of (II) bound to (I) to
 CC obtain a value (i); (c) repeating steps (a) and (b) with a second
 CC sample at a different time to obtain a second value (ii); and (d)
 CC determining the difference between (i) and (ii) which is inversely
 CC related to the degree of aggregation of (I). This method may be
 CC applied to a screen for compounds that inhibit aggregation of (I).
 CC These inhibitors may be used as therapeutic drugs to inhibit the
 CC formation of these aggregates in the brains of patients suffering
 CC from Alzheimer's disease.

XX Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGVVIA 42

RESULT 12

AA08607
 ID AAY08607 standard; Protein; 42 AA.

XX AAY08607;

XX 05-AUG-1999 (first entry)

XX Human beta-amyloid precursor core protein A42.

XX APP; beta-amyloid precursor protein; human; transgenic mice; pathology;
 XX Alzheimer's disease; model; therapeutic compound; brain; mechanism;
 XX nerve tissue specific promoter; synthesis; inhibitor; deposition;
 XX plaque formation; treatment; A42.

XX Homo sapiens.

XX US5912410-A.

XX 15-JUN-1999.

XX 13-APR-1995; 95US-0422333.

XX 21-OCT-1994; 94US-0327381.

XX 15-JUN-1990; 90US-0538857.

XX 17-JUN-1991; 91US-0716725.

XX 13-APR-1995; 95US-0422333.

XX (SCIO-) SCIOS INC.

XX Cordell B;

XX WPI; 1999-357231/30.

XX Transgenic mice useful for studying compounds potentially useful in
 XX the treatment of Alzheimer's disease

XX Disclosure; Fig 3; 72pp; English.

CC This invention describes novel transgenic mice expressing proteins
 CC related to the pathology of Alzheimer's disease and which provide models
 CC for studying potentially therapeutic compounds. The transgenic mice
 CC contain a DNA sequence encoding a beta-amyloid precursor protein (APP)
 CC and a nerve tissue specific promoter operably linked to the beta-APP
 CC allowing its expression to form beta-amyloid protein deposits in the
 CC animal's brain. The transgenic mouse is useful for elucidating the
 CC molecular mechanisms involved in the synthesis of and, more importantly,
 CC inhibiting the synthesis and deposition of beta-amyloid proteins (most
 CC importantly in the brain where plaque formation is associated with
 CC Alzheimer's disease) by inhibiting production and/or increasing cleavage
 CC after production. The transgenic animals provide useful models for
 CC studying the in vivo relationships of the proteins to each other and to
 CC other compounds being tested for their usefulness in treating Alzheimer's
 CC disease.

XX Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGVVIA 42
 Db 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGVVIA 42

RESULT 13

AAW29093

ID AAW29093 standard; peptide; 42 AA.

XX AAW29093;

XX 20-JUL-1999 (first entry)

XX A-beta-binding peptide 1-42.

XX Cyclosporin; A-beta peptide; conjugate; neurological disease;
 XX Alzheimer; multiple sclerosis; amyotrophic lateral sclerosis;
 XX ALS; non-immunosuppressive; amyloid plaque formation.

XX Homo sapiens.

XX WO9910374-A1.

XX 04-MAR-1999.

XX 25-AUG-1998; 98WO-US17544.

XX 26-AUG-1997; 97US-0057751.

XX (WISC) WISCONSIN ALUMNI RES FOUND.

XX Rich DH, Solomon ME;

XX WPI; 1999-276928/23.

XX New A-beta-binding peptide conjugates and CSA analogs - useful in
 XX treatment of neurological diseases e.g. Alzheimer's disease,
 XX multiple sclerosis etc.

XX Claim 5; Page 98; 129pp; English.

XX New conjugates are disclosed which are of formula A-Z, in which: A is
 CC (1) a cyclosporin A analogue described in AAW29087 or (2) an FK506
 CC binding peptide inhibitor; and Z is a polypeptide comprising 5 or more
 CC contiguous residues of A-beta peptide. The compounds are novel chemical
 CC inducers of dimerization which are non-immunosuppressive and which are
 CC inhibitors of A-beta peptide aggregation and deposition in amyloid
 CC plaques. The adverse consequences of amyloid plaque formation can be
 CC prevented or ameliorated by sequestering the A-beta peptide in monomeric
 CC form with a conjugate which links the A-beta to cyclophilin or FKBP,
 CC therefore providing a mechanism to minimize the amount of free A-beta

CC available for fibril formation and deposition. The compounds can be used
 CC for the treatment of Alzheimer's disease, multiple sclerosis and
 CC amyotrophic lateral sclerosis.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 |||||
 DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 14

AAW99585
 ID AAW99585 standard; peptide; 42 AA.

XX AC AAW99585;

XX DT 22-JUN-1999 (first entry)

XX DE Mutant aggregating amyloid-beta peptide.

XX KW Aggregation; amyloid-beta peptide; fluorescent group; detection;
 XX diagnosis; Alzheimer's disease.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN WO9908695-A1.

XX PD 25-FEB-1999.

XX PF 13-AUG-1998; 98WO-US16809.

XX PR 14-AUG-1997; 97US-0055660.

XX PA (REGC) UNIV CALIFORNIA.

XX PI Garzon-Rodriguez W, Glabe C;

XX DR WPI; 1999-190112/16.

XX FT New fluorescent labeled amyloid A-beta peptides

XX PS Example 1; Page 21; 50pp; English.

XX CC This sequence corresponds to a mutant aggregating amyloid-beta peptide
 CC which can be covalently labelled with a fluorescent group. The detection
 CC or monitoring of an amyloid aggregate in a sample can be used to diagnose
 CC or detect a predisposition to Alzheimer's disease. The screening assays
 CC can be used to identify compounds for the treatment or amelioration of
 CC Alzheimer's disease or its symptoms. The fluorescent derivatives of the
 CC amyloid-beta peptide are also useful for exploring other aspects of
 CC amyloid structure.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;
 Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42
 |||||
 DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

RESULT 15

AAW92726
 ID AAW92726 standard; peptide; 42 AA.

XX

AC AAW92726;

XX DT 30-APR-1999 (first entry)

XX DE Human tachykinin agonist beta-amyloid peptide fragment #72.

XX KW Tachykinin agonist; beta-amyloid; inhibition; neurotoxin; treatment;
 KW Alzheimer's disease; Down's syndrome; amyloidosis; human;
 KW hereditary cerebral haemorrhage; non-inherited congophilic angiopathy.

XX OS Homo sapiens.

XX PN US5876948-A.

XX PD 02-MAR-1999.

XX PF 27-JUL-1991; 91US-0737371.

XX PR 29-JUL-1991; 91US-0737371.

XX PR 27-JUL-1990; 90US-0559173.

XX PA (CHIL-) CHILDRENS MEDICAL CENT.

XX PI Yankner BA;

XX DR WPI; 1999-189630/16.

XX FT Screening for neurotoxin inhibitors - by testing compounds for their
 XX effect on beta-amyloid peptide neurotoxic effect on neuronal cells

XX PS Disclosure; Column 41-42; 28pp; English.

XX CC This invention describes a method for screening compounds for inhibiting
 CC a neurotoxin. The method involves incubating tachykinin agonists with
 CC neuronal cells and a beta-amyloid peptide neurotoxin. The methods can be
 CC used for identifying compounds for treating diseases characterised by an
 CC undesirable build up of beta-amyloid protein, e.g. Alzheimer's disease,
 CC Down's syndrome, and the syndromes of hereditary cerebral haemorrhage
 CC with amyloidosis and non-inherited congophilic angiopathy with cerebral
 CC haemorrhage. AAW92655-W92731 are tachykinin agonists derived from human
 CC beta-amyloid peptide fragments.

XX SQ Sequence 42 AA;

Query Match 100.0%; Score 217; DB 20; Length 42;
 Best Local Similarity 100.0%; Pred. No. 8.2e-25;

Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

DB 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA 42

Search completed: April 21, 2003, 12:06:29

Job time : 38 secs

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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:06:55 ; Search time 28.3333 Seconds
(without alignments)
47.030 Million cell updates/sec

Title: US-09-580-018-8
Perfect score: 10
Sequence: 1 MDAEFRHDSG 10

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 908470 seqs, 133250620 residues

Word size : 0

Total number of hits satisfying chosen parameters: 174064

Minimum DB seq length: 0
Maximum DB seq length: 10

Post-processing: Listing first 45 summaries

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15:	/SID22/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*		
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22:	/SID22/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*		
23:	/SID22/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*		

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	10	100.0	10	22	Human APP derived
2	9	90.0	10	15	Human amyloid prec
3	9	90.0	10	22	Human APP derived
4	9	90.0	10	22	Human APP derived
5	8	80.0	8	23	N terminus of beta
6	8	80.0	10	22	Human APP derived
7	8	80.0	10	22	Human APP derived
8	7	70.0	7	22	Human APP A-beta p
9	7	70.0	7	23	Synthetic peptide
10	7	70.0	8	19	Beta-amyloid pepti

11	7	70.0	10	22	Human APP derived
12	7	70.0	10	22	Human APP derived
13	6	60.0	6	19	Beta-amyloid pepti
14	6	60.0	10	13	Human amyloid pr
15	6	60.0	10	13	Human amyloid pr
16	6	60.0	10	21	Beta-APP alpha-sec
17	6	60.0	10	21	Beta-APP alpha-sec
18	6	60.0	10	21	Beta-APP alpha-sec
19	6	60.0	10	22	Human wild-type AP
20	6	60.0	10	22	Human amyloid prec
21	6	60.0	10	22	Asp2 recognition s
22	6	60.0	10	22	Human beta-amyloid
23	6	60.0	10	22	Human wild-type AP
24	6	60.0	10	22	Synthetic peptide
25	6	60.0	10	22	Human APP derived
26	6	60.0	10	22	Human APP derived
27	6	60.0	10	22	Synthetic peptide f
28	6	60.0	10	23	Peptide #1 used as
29	6	60.0	10	23	Beta-secretase spe
30	6	60.0	10	23	Human APP beta-sec
31	5	50.0	5	14	Beta-amyloid prote
32	5	50.0	5	20	Human NSE promoter
33	5	50.0	5	21	Beta-APP alpha-sec
34	5	50.0	5	22	Human APP-Sw mutan
35	5	50.0	5	22	Peptide product of
36	5	50.0	5	22	Human APP-2 beta-s
37	5	50.0	5	22	Human beta-amyloid
38	5	50.0	6	19	Beta-amyloid pepti
39	5	50.0	6	22	Human APP A-beta 1
40	5	50.0	6	22	Human amyloid beta
41	5	50.0	7	23	Beta-secretase pep
42	5	50.0	8	18	Immunogen for rais
43	5	50.0	8	18	Immunogen for rais
44	5	50.0	8	21	Beta-secretase sub
45	5	50.0	8	22	Human Aspartyl pro

ALIGNMENTS

RESULT 1	
AA046212	AA046212 standard; peptide; 10 AA.
ID	AA046212 standard; peptide; 10 AA.
XX	
AC	AA046212;
XX	
DT	04-APR-2001 (first entry)
XX	
DE	Human APP derived immunogenic peptide #8.
XX	
KW	Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
KW	Pc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW	amyloid precursor protein; Alzheimer's disease.
XX	
OS	Homo sapiens.
XX	
PN	WO200072880-A2.
XX	
PD	07-DEC-2000.
XX	
PF	26-MAY-2000; 2000WO-US14810.
XX	
PR	28-MAY-1999; 99US-0322289.
XX	
PA	(NEUR-) NEURALAB LTD.
XX	
PI	Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX	
DR	WPI; 2001-032104/04.
XX	
PT	Preventing or treating a disease associated with amyloid deposits,
PT	especially Alzheimer's disease, comprises administering amyloid
PT	specific antibody

XX Disclosure; Figure 19; 143pp; English.

XX This invention describes a novel method of preventing or treating a

XX disease associated with amyloid deposits of amyloid precursor protein

XX (APP) Abeta fragments in the brain of a patient, which comprises

XX administering to the patient: (a) an antibody that binds to Abeta, the

XX antibody binds to an amyloid deposit and induces a clearing response (Fc

XX receptor mediated phagocytosis) against it (b) a polypeptide containing

XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX that induces an immunogenic response against residues 1-3 to 7-11 of

XX Abeta. The products of the invention have neurotropic and neuroprotective

XX activity. The method is also useful for monitoring a course of treatment

XX being administered to a patient e.g. active and passive immunization. The

XX methods are useful for prophylactic and therapeutic treatment of

XX Alzheimer's disease.

XX Sequence 10 AA;

Query Match 100.0%; Score 10; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 2.3e-05;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAEFRHDSG 10

DB 1 MDAEFRHDSG 10

IIIIIIIIII

RESULT 2

AAR58928

ID AAR58928 standard; peptide: 10 AA.

AC AAR58928;

DT 15-APR-1995 (first entry)

DE Human amyloid precursor protein APP695 residues 597-606.

XX Amyloid precursor protein; Isoform APP 695; beta amyloid;

XX Alzheimer's disease.

XX Homo sapiens.

XX WO9419692-A.

XX 01-SEP-1994.

XX 17-FEB-1994; 94WO-US01712.

XX 18-FEB-1993; 93US-0019208.

XX (GEO) GEN HOSPITAL CORP.

XX Nishimoto I;

XX WPI; 1994-294486/36.

XX Identifying cpds. useful for treating or preventing Alzheimer's

XX disease - by determining whether it interferes with the

XX association of the couple portion of amyloid precursor protein

XX to G polypeptide

XX Disclosure; Page 33; 71pp; English.

XX Beta amyloid is synthesized as part of a larger protein referred to

XX as amyloid precursor protein (APP), which has a number of isoforms

XX in humans, including APP695 and APP770. The amino terminal of beta

XX amyloid is generated by cleavage of a peptide bond of APP which in

XX APP695 lies between Met596 and Asp597. APP forms a complex with Go,

XX a GTP-binding protein (or "G protein") in brain. Go is made of one

XX alpha subunit and one beta-gamma subunit. Two isoforms of Go, known

XX as Go1 (or GoA) and Go2 (or GoB) have been identified; they have

XX slight AA differences in their alpha subunits. The cDNA sequence and

CC deduced AA sequence of the alpha subunits in each of Go1 and Go2 are

CC shown in AA069002/R58914 and AA069004/R58924 respectively. The

CC cytoplasmic APP695 sequence His657-Lys676 (AAR58913) possesses a

CC specific Go-activating function; and is necessary for complex

CC formation of this APP with Go. AAR58928 is another peptide of

CC APP695 which corresp. to AAs 597-606.

XX Sequence 10 AA;

Query Match 90.0%; Score 9; DB 15; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00033;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DAEFRHDSG 10

DB 1 DAEFRHDSG 9

IIIIIIIIII

RESULT 3

AAB46211

ID AAB46211 standard; peptide: 10 AA.

AC AAB46211;

DT 04-APR-2001 (first entry)

DE Human APP derived immunogenic peptide #7.

XX Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;

XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;

XX amyloid precursor protein; Alzheimer's disease.

XX Homo sapiens.

XX WO200072860-A2.

XX 07-DEC-2000.

XX 26-MAY-2000; 2000WO-US14810.

XX 28-MAY-1999; 99US-0322289.

XX (NEUR-) NEURALAB LTD.

XX Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX WPI; 2001-032104/04.

XX Preventing or treating a disease associated with amyloid deposits,

XX especially Alzheimer's disease, comprises administering amyloid

XX specific antibody -

XX Disclosure; Figure 19; 143pp; English.

XX This invention describes a novel method of preventing or treating a

XX disease associated with amyloid deposits of amyloid precursor protein

XX (APP) Abeta fragments in the brain of a patient, which comprises

XX administering to the patient: (a) an antibody that binds to Abeta, the

XX antibody binds to an amyloid deposit and induces a clearing response (Fc

XX receptor mediated phagocytosis) against it (b) a polypeptide containing

XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX that induces an immunogenic response against residues 1-3 to 7-11 of

XX Abeta. The products of the invention have neurotropic and neuroprotective

XX activity. The method is also useful for monitoring a course of treatment

XX being administered to a patient e.g. active and passive immunization. The

XX methods are useful for prophylactic and therapeutic treatment of

XX Alzheimer's disease.

XX Sequence 10 AA;

Query Match 90.0%; Score 9; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00033;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAEFRHDS 9
 DB 2 MDAEFRHDS 10

 RESULT 4
 AAB46213
 ID AAB46213 standard; peptide: 10 AA.
 XX
 AC AAB46213;
 XX
 DT 04-APR-2001 (first entry)
 DE
 DE Human APP derived immunogenic peptide #9.
 XX
 KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
 KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200072880-A2.
 XX
 XX 07-DEC-2000.
 XX
 PF 26-MAY-2000; 2000WO-US14810.
 XX
 PR 28-MAY-1999; 99US-0322289.
 XX
 PA (NEUR-) NEURALAB LTD.
 XX
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX
 DR WPI; 2001-032104/04.
 XX
 PT Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -
 XX
 PS Disclosure; Figure 19; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have nootropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 SQ Sequence 10 AA;

 Query Match 90.0%; Score 9; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.00033;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 2 DAEFRHDSG 10
 DB 1 DAEFRHDSG 9

 RESULT 5
 AAU78518
 ID AAU78518 standard; Peptide: 8 AA.
 XX
 AC AAU78518;
 XX

DT 18-JUN-2002 (first entry)
 XX
 DE N terminus of beta amyloid.
 XX
 KW Alzheimer's disease; beta amyloid precursor protein; mouse;
 KW BACE; beta-site APP cleaving enzyme; nootropic; neuroprotective;
 KW beta-site amyloid precursor protein (APP)-cleaving enzyme; APP;
 KW BACE secretase/shedase; neurodegenerative disorder.
 XX
 OS Mus sp.
 XX
 PN WO200210354-A2.
 XX
 PD 07-FEB-2002.
 XX
 PF 01-AUG-2001; 2001WO-CA01118.
 XX
 PR 01-AUG-2000; 2000CA-2313828.
 XX
 PA (RECL-) INST RECH CLINIQUES MONTREAL.
 XX
 PI Seidah NG, Chretien M, Cromlish JA;
 XX
 DR WPI; 2002-280632/32.
 XX
 PT Modulating activity of beta-site amyloid precursor protein-cleaving
 PT enzyme secretase/shedase for treatment of neurodegenerative disorder
 PT characterised by generation of Abeta protein, by preventing cleavage of
 PT enzyme -
 XX
 PS Disclosure; Page 28; 64pp; English.
 XX
 CC This invention relates to a novel method for modulating activity of
 CC beta-site amyloid precursor protein (APP)-cleaving enzyme (BACE)
 CC secretase/shedase. Cleavage of BACE by this enzyme results in the
 CC generation of a soluble BACE which enhances the production of the
 CC amyloidogenic peptide Abeta which has been shown to be involved in the
 CC aetiology of Alzheimer's disease. Inhibition of BACE secretase can be
 CC achieved by administration of an antisense nucleotide molecule capable
 CC of hybridising with BACE mRNA, by using a ribozyme that targets and
 CC degrades BACE secretase mRNA, with a peptide that can interfere with
 CC binding of the enzyme with BACE or using an antibody or antagonist that
 CC can function as an inhibitor of BACE secretase activation. The methods
 CC of the invention modulate the activity of BACE secretase/shedase by
 CC preventing cleavage of BACE, which is useful for the treatment of a
 CC neurodegenerative disorder characterised by the generation of Abeta
 CC protein, especially Alzheimer's disease. The invention also comprises a
 CC method for identification of an agent that can alter the ability of BACE
 CC secretase to associate with and process a known substrate, this method
 CC can be used for high throughput screening of candidate molecules. The
 CC invention also comprises a method for determining whether an individual
 CC is at risk of developing a neurodegenerative disorder characterised
 CC by the generation of Abeta protein by measuring the levels of BACE
 CC C terminal cleavage products in a sample of tissue where an increase
 CC in cleavage products indicates a person at risk. The present sequence
 CC represents the N terminal of a beta amyloid protein of the
 CC invention.
 XX
 SQ Sequence 8 AA;

 Query Match 80.0%; Score 8; DB 23; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.8e-05;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 2 DAEFRHDS 9
 DB 1 DAEFRHDS 8

 RESULT 6
 AAB46210
 ID AAB46210 standard; peptide: 10 AA.
 XX

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AC AAB46210;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP derived immunogenic peptide #6.
XX
KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX
PN WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
DR WPI; 2001-032104/04.
XX
PT Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
PS Disclosure; Figure 19; 143pp; English.
XX
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nootropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 10 AA;
XX
Query Match 80.0%; Score 8; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0048;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAEFRHD 8
Db 3 MDAEFRHD 10
|||||||

RESULT 7
AAB46214
ID AAB46214 standard; peptide; 10 AA.
XX
AC AAB46214;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP derived immunogenic peptide #10.
XX
KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX

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PN WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
DR WPI; 2001-032104/04.
XX
PT Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
PS Disclosure; Figure 19; 143pp; English.
XX
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nootropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 10 AA;
XX
Query Match 80.0%; Score 8; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0048;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 AEFRRHDSG 10
Db 1 AEFRRHDSG 8
|||||||

RESULT 8
AAB46202
ID AAB46202 standard; peptide; 7 AA.
XX
AC AAB46202;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP A-beta protein N-terminal fragment.
XX
KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX
PN WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX

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DR WPI; 2001-032104/04.
 XX Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specifically antibody -
 XX
 XX Claim 59; Page 119; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binding to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have neurotropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 XX Sequence 7 AA;

Query Match 70.0%; Score 7; DB 22; Length 7;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DAEFRHD 8
 DB 1 DAEFRHD 7

RESULT 9
 AA014421
 ID AAO14421 standard; Peptide; 7 AA.
 AC
 AC AAO14421;
 DT 02-MAY-2002 (first entry)
 XX
 DE Synthetic peptide of A-Beta residues 1-7 (DAEFRHD).
 XX
 KW Neurodegenerative disorder; Alzheimer's disease; AD; T7141; APP; APP714;
 KW amyloid precursor protein; amyloid Beta peptide; A-Beta; A-Beta40; brain;
 KW A-Beta42; plaque pathology; pre-amyloid; cerebral amyloid angiopathy;
 KW dense-cored plaque; CAA; senile plaque core; amyloid cascade; murine;
 KW mouse; DAEFRHD; monoclonal antibody.
 XX
 OS Mus sp.
 OS Synthetic.
 XX
 XX WO200202769-A1.
 PN
 XX 10-JAN-2002.
 XX
 XX 06-JUL-2001; 2001WO-EP07830.
 PF
 XX 06-JUL-2000; 2000EP-0202362.
 PR
 XX (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
 PA
 XX
 XX Cruts M, De Jonghe C, Kumar Singh S, Van Broeckhoven C;
 PI
 XX WPI; 2002-154742/20.
 DR
 XX Novel polynucleotide sequence encoding a mutant of amyloid precursor
 PT protein 70, useful for screening for a molecule capable of reducing the
 PT formation of beta amyloid 42 peptide
 PT
 XX Disclosure; Page 21; 42pp; English.
 PS
 XX The invention relates to the field of the neurodegenerative disorder of

CC Alzheimer's disease (AD). In particular, the invention provides a novel
 CC mutation (T714I) identified in the amyloid precursor protein (APP),
 CC APP714, which leads to a very aggressive form of AD. The mutation
 CC involves the 43rd codon of the amyloid Beta peptide (A-Beta)
 CC corresponding to the putative gamma 42-secretase cleavage site. The
 CC novel mutation alters both A-Beta40 and A-Beta42 secretion elevating
 CC the A-Beta42/A-Beta40 ratio by 10-fold in vitro. Furthermore, the main
 CC amyloid plaque pathology in brains of these patients is of the diffuse
 CC 'pre-amyloid' type composed primarily of N-truncated A-Beta42. Dense-
 CC cored plaques although not absent, were significantly reduced. Also, the
 CC usual sites in brain where A-Beta40 is predominantly deposited, for
 CC instance, in vessels as cerebral amyloid angiopathy (CAA) or senile
 CC plaque cores, were composed entirely of A-Beta42 form. Together, these
 CC indicate that deposition of N-truncated A-Beta42 in one of the earliest
 CC amyloid deposited in the brain, the diffuse plaques, is fully competent
 CC of inciting AD either through the well-established 'amyloid cascade' or
 CC by a yet unknown mechanism(s). This sequence represents a synthetic
 CC peptide of A-Beta, residues 1-7 (DAEFRHD). This sequence was used for
 CC raising a monoclonal antibody specific for the N-terminus of A-Beta40 and
 CC A-Beta42 by immunising mice with the synthetic peptide.

XX Sequence 7 AA;

Query Match 70.0%; Score 7; DB 23; Length 7;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DAEFRHD 8
 DB 1 DAEFRHD 7

RESULT 10
 AAW70865
 ID AAW70865 standard; peptide; 8 AA.

XX
 AC AAW70865;
 DT 04-FEB-1999 (first entry)
 XX
 DE Beta-amyloid peptide to create a monoclonal antibody.
 XX
 KW Beta-amyloid precursor protein; beta-APP; beta-amyloid peptide;
 KW antibody; amyloid deposit; Alzheimer's disease.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9844955-A1.
 XX
 XX 15-OCT-1998.
 PD
 XX 09-APR-1998; 98WO-US06900.
 PF
 XX 09-APR-1997; 97US-0041850.
 PR
 XX (MCIN/) MCINNIS P A.
 PA (MIND-) MINDSET LTD.
 XX
 PI Chain DG;
 XX
 XX WPI; 1998-594476/50.
 DR
 XX Preventing or inhibiting progression of Alzheimer's Disease -
 PT comprises use of recombinant DNA encoding an antibody specific for
 PT the N- or C-terminus of an amyloid-beta peptide
 PT
 XX Example 1; Page 46; 58pp; English.
 XX
 CC The present sequence represents a peptide derived from beta-amyloid
 CC precursor protein (beta-APP, see AAW70863). The peptide is a
 CC beta-amyloid peptide and is used to produce a monoclonal antibody
 CC designated antiselinin N1/7. The specification describes a method for

CC prevention or inhibition of progression of Alzheimer's disease. The
 CC method comprises administering a composition comprising a recombinant DNA
 CC molecule containing a gene encoding a recombinant antibody end-specific
 CC for the N-terminus or the C-terminus of an amyloid-beta peptide, operably
 CC linked to a promoter which is expressed in the central nervous system.
 CC The recombinant antibody molecules prevent the accumulation of
 CC beta-amyloid peptides in the extracellular space, interstitial fluid and
 CC cerebrospinal fluid and the aggregation of such peptides into amyloid
 CC deposits in the brain. They also inhibit the progression of Alzheimer's
 CC disease by inhibiting the interaction of beta-amyloid peptides mediating
 CC Alzheimer's disease induced neurotoxicity and inhibiting the Alzheimer's
 CC disease induced complement activation and cytokine release involved in
 CC the inflammatory process.
 XX
 XX Sequence 8 AA;
 SQ
 Query Match 70.0%; Score 7; DB 19; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05; Indels 0; Gaps 0;
 Matches 7; Conservative 0; Mismatches 0;
 QY 2 DAEFRHD 8
 DB 1 DAEFRHD 7
 RESULT 11
 AAB46209
 ID AAB46209 standard; peptide; 10 AA.
 AC AAB46209;
 XX
 XX 04-APR-2001 (first entry)
 DT Human APP derived immunogenic peptide #5.
 DE
 XX
 XX Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 XX amyloid precursor protein; Alzheimer's disease.
 OS Homo sapiens.
 XX
 XX WO200072880-A2.
 PN 07-DEC-2000.
 PD
 XX
 XX 26-MAY-2000; 2000WO-US14810.
 PF
 XX 28-MAY-1999; 99US-0322289.
 XX
 XX (NEUR-) NEURALAB LTD.
 PA
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX WPI; 2001-032104/04.
 DR
 XX Preventing or treating a disease associated with amyloid deposits,
 XX especially Alzheimer's disease, comprises administering amyloid
 XX specific antibody -
 XX Disclosure; Figure 19; 143pp; English.
 XX
 XX This invention describes a novel method of preventing or treating a
 XX disease associated with amyloid deposits of amyloid precursor protein
 XX (APP) Abeta fragments in the brain of a patient, which comprises
 XX administering to the patient: (a) an antibody that binds to Abeta, the
 XX antibody binds to an amyloid deposit and induces a clearing response (Fc
 XX receptor mediated phagocytosis) against it (b) a polypeptide containing
 XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 XX that induces an immunogenic response against residues 1-3 to 7-11 of
 XX Abeta. The products of the invention have neurotropic and neuroprotective
 XX activity. The method is also useful for monitoring a course of treatment
 XX being administered to a patient e.g. active and passive immunization. The
 XX methods are useful for prophylactic and therapeutic treatment of

CC Alzheimer's disease.
 XX Sequence 10 AA;
 SQ
 Query Match 70.0%; Score 7; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.069;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MDAEFRH 7
 DB 4 MDAEFRH 10
 RESULT 12
 AAB46215
 ID AAB46215 standard; peptide; 10 AA.
 AC AAB46215;
 XX
 XX 04-APR-2001 (first entry)
 DT Human APP derived immunogenic peptide #11.
 DE
 XX
 XX Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 XX amyloid precursor protein; Alzheimer's disease.
 OS Homo sapiens.
 XX
 XX WO200072880-A2.
 PN 07-DEC-2000.
 PD
 XX
 XX 26-MAY-2000; 2000WO-US14810.
 PF
 XX 28-MAY-1999; 99US-0322289.
 XX
 XX (NEUR-) NEURALAB LTD.
 PA
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX WPI; 2001-032104/04.
 DR
 XX Preventing or treating a disease associated with amyloid deposits,
 XX especially Alzheimer's disease, comprises administering amyloid
 XX specific antibody -
 XX Disclosure; Figure 19; 143pp; English.
 XX
 XX This invention describes a novel method of preventing or treating a
 XX disease associated with amyloid deposits of amyloid precursor protein
 XX (APP) Abeta fragments in the brain of a patient, which comprises
 XX administering to the patient: (a) an antibody that binds to Abeta, the
 XX antibody binds to an amyloid deposit and induces a clearing response (Fc
 XX receptor mediated phagocytosis) against it (b) a polypeptide containing
 XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 XX that induces an immunogenic response against residues 1-3 to 7-11 of
 XX Abeta. The products of the invention have neurotropic and neuroprotective
 XX activity. The method is also useful for monitoring a course of treatment
 XX being administered to a patient e.g. active and passive immunization. The
 XX methods are useful for prophylactic and therapeutic treatment of
 XX Alzheimer's disease.
 XX Sequence 10 AA;
 SQ
 Query Match 70.0%; Score 7; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.069;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4 EFRHDSG 10
 DB 1 EFRHDSG 7

RESULT 13
AAW70868
ID AAW70868 standard; peptide; 6 AA.
AC AAW70868;
XX
XX
DT 04-FEB-1999 (first entry)
XX
XX Beta-amyloid peptide to create a monoclonal antibody.
DE
XX
XX Beta-amyloid precursor protein; beta-APP; beta-amyloid peptide;
KW antibody; amyloid deposit; Alzheimer's disease.
KW
XX Synthetic.
OS Homo sapiens.
XX
XX WO9844955-A1.
PN
XX
XX 15-OCT-1998.
PD
XX
XX 09-APR-1998; 98WO-US06900.
PF
XX
XX 09-APR-1997; 97US-0041850.
PR
XX
XX (MCIN/) MCINNIS P A.
PA (MIND-) MINDSET LTD.
PA
XX Chain DG;
PI
XX
XX WPI; 1998-594476/50.
DR
XX
XX Preventing or inhibiting progression of Alzheimer's Disease -
PT comprises use of recombinant DNA encoding an antibody specific for
PT the N- or C-terminus of an amyloid-beta peptide
PS
XX Example 1; Page 47; 58pp; English.
XX
XX The present sequence represents a peptide derived from beta-amyloid
CC precursor protein (beta-APP, see AAW70863). The peptide is a
CC beta-amyloid peptide and is used to produce a monoclonal antibody. The
CC specification describes a method for prevention or inhibition of
CC progression of Alzheimer's disease. The method comprises administering a
CC composition comprising a recombinant DNA molecule containing a gene
CC encoding a recombinant antibody end-specific for the N-terminus or the
CC C-terminus of an amyloid-beta peptide, operably linked to a promoter
CC which is expressed in the central nervous system. The recombinant
CC antibody molecules prevent the accumulation of beta-amyloid peptides in
CC the extracellular space, interstitial fluid and cerebrospinal fluid and
CC the aggregation of such peptides into amyloid deposits in the brain.
CC They also inhibit the progression of Alzheimer's disease by inhibiting
CC the interaction of beta-amyloid peptides mediating Alzheimer's disease
CC induced neurotoxicity and inhibiting the Alzheimer's disease induced
CC complement activation and cytokine release involved in the inflammatory
CC process.
XX
XX Sequence 6 AA;
SQ
Query Match 60.0%; Score 6; DB 19; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.8e-05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 DAEFRH 7
Db 1 DAEFRH 6
IIIIII
IIIIII
RESULT 14
AAR24262
ID AAR24262 standard; Protein; 10 AA.
XX
XX
AC AAR24262;
XX

DT 09-NOV-1992 (first entry)
XX
XX Human amyloidin protease substrate sequence #2.
DE
XX Alzheimer's disease; beta amyloid precursor protein; APP; zinc;
KW metalloprotease; hAP; protease inhibitor; APP592-601
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT Modified-site 1 /note= "Acetylated-Ser"
XX
XX WO9207068-A.
PN
XX
XX 30-APR-1992.
PD
XX
XX 04-OCT-1991; 91WO-US07290.
PF
XX
XX 05-OCT-1990; 90US-0594122.
PR
XX 30-SEP-1991; 91US-0766351.
PR
XX (ATHE-) ATHENA NEUROSCIENCES INC.
PA (ELLIL) LILLY & CO ELLI.
PA
XX
XX Dovey HF, Johnstone EM, Little SP, McConlogue L, Seubert PA;
PI Sinha S;
PI
XX WPI; 1992-167148/20.
DR
XX
XX Human amyloidin protease - used for cleaving Met-Asp bond in
PT amyloid-like substrate for identifying protease inhibitors
PT
XX Example 5; Page 29; 62pp; English.
XX
XX This synthetic substrate is based on the sequence of residues 592
CC to 601 of the 695 amino acid APP. Lys595 has been replaced by Gln.
CC Amyloidin cleaves the Met-Asp bond of this peptide but does not
CC cleave any of the other bonds.
CC See AAR24260-3, AAR24266-7 and AAO24875-Q24887.
XX
XX Sequence 10 AA;
SQ
Query Match 60.0%; Score 6; DB 13; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.99; Indels 0; Gaps 0;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MDAEFR 6
Db 5 MDAEFR 10
IIIIII
IIIIII
RESULT 15
AAR24261
ID AAR24261 standard; Protein; 10 AA.
XX
XX
XX AAR24261;
AC
XX
XX 09-NOV-1992 (first entry)
DT
XX
XX Human amyloidin protease substrate sequence #1.
DE
XX Alzheimer's disease; beta amyloid precursor protein; APP; zinc;
KW metalloprotease; hAP; protease inhibitor; APP592-601
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT Modified-site 1 /note= "Acetylated-Ser"
XX
XX WO9207068-A.
PN
XX

PD 30-APR-1992.
 XX
 PF 04-OCT-1991; 91WO-US07290.
 XX
 PR 05-OCT-1990; 90US-0594122.
 PR 30-SEP-1991; 91US-0766351.
 XX
 PA (ATHE-) ATHENA NEUROSCIENCES INC.
 PA (ELIL) LILLY & CO ELI.
 XX
 PI Dovey HF, Johnstone EM, Little SP, McConlogue L, Seubert PA;
 PI Sinha S;
 XX
 DR WPI; 1992-167148/20.
 XX
 PT Human amyloidin protease - used for cleaving Met-Asp bond in
 PT amyloid-like substrate for identifying protease inhibitors
 XX
 PS Claim 1; Page 52; 62pp; English.
 XX
 CC Claimed human amyloidin protease is defined by its ability to
 CC cleave the Met-Asp bond of this synthetic substrate. The substrate,
 CC which corresponds to residues 592 to 601 of the 695 amino acid APP,
 CC can be used in an assay for identifying inhibitors of proteases
 CC which cleave Met-Asp bonds, e.g. amyloidin, human skin chymase or
 CC rat mast cell protease I or II.
 CC See AAR24260-3, AAR24266-7 and AAQ24875-Q24887.
 XX
 SQ Sequence 10 AA;
 Query Match 60.0%; Score 6; DB 13; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.99;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MDAEFR 6
 Db 5 MDAEFR 10
 |||||
 |||||

Search completed: April 21, 2003, 12:10:00
 Job time : 29.3333 secs

GenCore version 5.1.4_p5_4578
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OM protein - protein search, using sw model

Run on: April 21, 2003, 12:06:55 ; Search time 28.3333 Seconds
(without alignments)
47.030 Million cell updates/sec

Title: US-09-580-018-10
Perfect score: 10
Sequence: 1 AEFHDSGYE 10

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 908470 seqs, 133250620 residues

Word size : 0

Total number of hits satisfying chosen parameters: 174064

Minimum DB seq length: 0
Maximum DB seq length: 10

Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	ID	Description
1	10	100.0	10	22	AA846214 Human APP derived
2	9	90.0	10	15	AA858928 Human amyloid prec
3	9	90.0	10	22	AA846213 Human APP derived
4	9	90.0	10	22	AA846215 Human APP derived
5	8	80.0	10	22	AA846212 Human APP derived
6	8	80.0	10	22	AA846216 Human APP derived
7	7	70.0	8	23	AAU78518 N terminus of beta
8	7	70.0	10	22	AA846211 Human APP derived
9	7	70.0	10	22	AA846217 Human APP derived
10	6	60.0	7	22	AA846202 Human APP A-beta p

11	6	60.0	7	23	AA014421 Synthetic peptide
12	6	60.0	8	19	Beta-amyloid pepti
13	6	60.0	10	22	Human APP derived
14	6	60.0	10	22	Human APP derived
15	5	50.0	5	23	AB05182 Beta amyloid pepti
16	5	50.0	6	19	AAW70868 Beta-amyloid pepti
17	5	50.0	6	23	AAU78501 Alpha secretase c1
18	5	50.0	10	21	AA967112 Doubly phosphoryla
19	5	50.0	10	21	AA967119 p-I-kappa-B-alpha
20	5	50.0	10	22	Human APP derived
21	5	50.0	10	22	Human APP derived
22	4	40.0	4	19	AAW70870 Beta-amyloid pepti
23	4	40.0	4	19	AAW70870 Sphingolipid desat
24	4	40.0	5	21	AA951336 Beta-APP alpha-sec
25	4	40.0	5	21	AA969702 Human APP-Sw mutan
26	4	40.0	5	22	AAE10667 Human Asp-2 beta-s
27	4	40.0	5	22	AAE06907 Peptide product of
28	4	40.0	5	22	AAU06636 Human beta-amyloid
29	4	40.0	6	14	AAU07235 LAMP-3 lysosome ta
30	4	40.0	6	19	AAW70864 Beta-amyloid pepti
31	4	40.0	6	21	AAW70864 Epitope pattern #
32	4	40.0	6	22	AA847109 Epitope #1 used in
33	4	40.0	6	22	AA846199 Human APP A-beta 1
34	4	40.0	6	22	AA849095 Human amyloid beta
35	4	40.0	7	21	AA807656 Peptide derived fr
36	4	40.0	7	21	AA802941 Nucleotide-binding
37	4	40.0	8	18	AAW19494 Immunogen for rais
38	4	40.0	8	18	AAW19507 Immunogen for rais
39	4	40.0	8	20	AA52751 Humanised ATR-5 H
40	4	40.0	9	21	AA51340 Sphingolipid desat
41	4	40.0	9	22	AAU02736 CDR region of anti
42	4	40.0	9	22	AAU02741 CDR region of anti
43	4	40.0	9	23	AB06519 Beta-secretase rel
44	4	40.0	10	11	AA808279 Laminin receptor-b
45	4	40.0	10	13	AA84262 Human amyloid pr

ALIGNMENTS

RESULT 1	
AA846214	
ID	AA846214 standard; peptide; 10 AA.
XX	AA846214;
XX	AC
XX	04-APR-2001 (first entry)
DT	Human APP derived immunogenic peptide #10.
DE	Anyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
XX	FC receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW	anyloid precursor protein; Alzheimer's disease.
KW	
XX	Homo sapiens.
OS	
XX	WO200072880-A2.
PN	07-DEC-2000.
PD	26-MAY-2000; 2000WO-US14810.
XX	28-MAY-1999; 99US-0322289.
XX	(NEUR-) NEURALAB LTD.
PA	Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX	WPI; 2001-032104/04.
DR	Preventing or treating a disease associated with amyloid deposits,
XX	especially Alzheimer's disease, comprises administering amyloid
PT	specific antibody
PT	

XX PS Disclosure; Figure 19; 143pp; English.

XX CC This invention describes a novel method of preventing or treating a

XX CC disease associated with amyloid deposits of amyloid precursor protein

XX CC (APP) Abeta fragments in the brain of a patient, which comprises

XX CC administering to the patient: (a) an antibody that binds to Abeta, the

XX CC antibody binds to an amyloid deposit and induces a clearing response (Fc

XX CC receptor mediated phagocytosis) against it (b) a polypeptide containing

XX CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX CC that induces an immunogenic response against residues 1-3 to 7-11 of

XX CC Abeta. The products of the invention have neurotropic and neuroprotective

XX CC activity. The method is also useful for monitoring a course of treatment

XX CC being administered to a patient e.g. active and passive immunization. The

XX CC methods are useful for prophylactic and therapeutic treatment of

XX CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 100.0%; Score 10; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 3.6e-05;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AEFRRHDSGYE 10

Db 1 AEFRRHDSGYE 10

|||||

RESULT 2

AAR58928

ID AAR58928 standard; peptide; 10 AA.

XX AC AAR58928;

XX DT 15-APR-1995 (first entry)

XX DE Human amyloid precursor protein APP695 residues 597-606.

XX KW Amyloid precursor protein; isoform APP 695; beta amyloid;

XX KW Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO9419692-A.

XX PD 01-SEP-1994.

XX PF 17-FEB-1994; 94WO-US01712.

XX PR 18-FEB-1993; 93US-0019208.

XX PA (GEHO) GEN HOSPITAL CORP.

XX PI Nishimoto I;

XX DR WPT; 1994-294486/36.

XX PT Identifying cpds. useful for treating or preventing Alzheimer's

XX PT disease - by determining whether it interferes with the

XX PT association of the couplone portion of amyloid precursor protein

XX PT to G polypeptide

XX PS Disclosure; Page 33; 71pp; English.

XX CC Beta amyloid is synthesised as part of a larger protein referred to

XX CC as amyloid precursor protein (APP), which has a number of isoforms

XX CC in humans, including APP695 and APP770. The amino terminal of beta

XX CC amyloid is generated by cleavage of a peptide bond of APP which in

XX CC APP695 lies between Met596 and Asp597. APP forms a complex with Go,

XX CC a GTP-binding protein (or "G protein"), in brain. Go is made of one

XX CC alpha subunit and one beta-gamma subunit. Two isoforms of Go, known

XX CC as Go1 (or GoA) and Go2 (or GoB) have been identified; they have

XX CC slight AA differences in their alpha subunits. The cDNA sequence and

CC deduced AA sequence of the alpha subunits in each of Go1 and Go2 are

CC shown in AA069002/R58914 and AA069004/R58924 respectively. The

CC cytoplasmic App695 sequence His657-Lys676 (AAR58913) possesses a

CC specific Go-activating function, and is necessary for complex

CC formation of this APP with Go. AAR58928 is another peptide of

CC APP695 which corresp. to AAs 597-606.

XX SQ Sequence 10 AA;

Query Match 90.0%; Score 9; DB 15; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00049;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AEFRRHDSGY 9

Db 2 AEFRRHDSGY 10

|||||

RESULT 3

AAB46213

ID AAB46213 standard; peptide; 10 AA.

XX AC AAB46213;

XX DT 04-APR-2001 (first entry)

XX DE Human APP derived immunogenic peptide #9.

XX KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;

XX KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;

XX KW amyloid precursor protein; Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO200072880-A2.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US14810.

XX PR 28-MAY-1999; 99US-0322289.

XX PA (NEUR-) NEURALAB LTD.

XX PI Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX DR WPT; 2001-032104/04.

XX PT Preventing or treating a disease associated with amyloid deposits,

XX PT especially Alzheimer's disease, comprises administering amyloid

XX PT specific antibody -

XX PS Disclosure; Figure 19; 143pp; English.

XX CC This invention describes a novel method of preventing or treating a

XX CC disease associated with amyloid deposits of amyloid precursor protein

XX CC (APP) Abeta fragments in the brain of a patient, which comprises

XX CC administering to the patient: (a) an antibody that binds to Abeta, the

XX CC antibody binds to an amyloid deposit and induces a clearing response (Fc

XX CC receptor mediated phagocytosis) against it (b) a polypeptide containing

XX CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX CC that induces an immunogenic response against residues 1-3 to 7-11 of

XX CC Abeta. The products of the invention have neurotropic and neuroprotective

XX CC activity. The method is also useful for monitoring a course of treatment

XX CC being administered to a patient e.g. active and passive immunization. The

XX CC methods are useful for prophylactic and therapeutic treatment of

XX CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 90.0%; Score 9; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00049;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 AEFRRDSCY 9
DB 2 AEFRRDSGY 10

RESULT 4
ID AAB46215 standard; peptide; 10 AA.
AC AAB46215;
XX
XX
DT 04-APR-2001 (first entry)
DE Human APP derived immunogenic peptide #11.
KW Anyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX
PN WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX WPI: 2001-032104/04.
XX
XX Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
XX Disclosure: Figure 19; 143pp; English.
XX
XX This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nootropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
XX Sequence 10 AA;
XX
XX Query Match 80.0%; Score 8; DB 22; Length 10;
XX Best Local Similarity 100.0%; Pred. No. 0.0066;
XX Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AEFRRDSCG 8
DB 3 AEFRRDSGY 10

RESULT 6
ID AAB46216 standard; peptide; 10 AA.
XX
XX AC AAB46216;
XX
XX DT 04-APR-2001 (first entry)
XX
XX DE Human APP derived immunogenic peptide #12.
XX
XX KW Anyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
XX KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
XX KW amyloid precursor protein; Alzheimer's disease.
XX
XX OS Homo sapiens.
XX
XX PN WO200072880-A2.
XX
XX

```

PD 07-DEC-2000.
 XX 26-MAY-2000; 2000WO-US14810.
 XX 28-MAY-1999; 99US-0322289.
 XX (NEUR-) NEURALAB LTD.
 XX Schenk DB, Bard F, Vasquez NJ, Yednock T;
 PI WPI; 2001-032104/04.
 XX Preventing or treating a disease associated with amyloid deposits,
 XX especially Alzheimer's disease, comprises administering amyloid
 XX specific antibody -
 XX Disclosure: Figure 19; 143pp; English.
 XX This invention describes a novel method of preventing or treating a
 XX disease associated with amyloid deposits of amyloid precursor protein
 XX (APP) Abeta fragments in the brain of a patient, which comprises
 XX administering to the patient: (a) an antibody that binds to Abeta, the
 XX antibody binds to an amyloid deposit and induces a clearing response (Fc
 XX receptor mediated phagocytosis) against it (b) a polypeptide containing
 XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 XX that induces an immunogenic response against residues 1-3 to 7-11 of
 XX Abeta. The products of the invention have neurotropic and neuroprotective
 XX activity. The method is also useful for monitoring a course of treatment
 XX being administered to a patient e.g. active and passive immunization. The
 XX methods are useful for prophylactic and therapeutic treatment of
 XX Alzheimer's disease.
 XX Sequence 10 AA;
 SQ Query Match 80.0%; Score 8; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.0066;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3 FRHDSGYE 10
 Db 1 FRHDSGYE 8
 RESULT 7
 AAU78518
 ID AAU78518 standard; Peptide; 8 AA.
 AC AAU78518;
 XX 18-JUN-2002 (first entry)
 DT N terminus of beta amyloid.
 DE Alzheimer's disease; beta amyloid precursor protein; mouse;
 XX BACE; beta-site APP cleaving enzyme; neurotropic; neuroprotective;
 KW beta-site amyloid precursor protein (APP)-cleaving enzyme; APP;
 KW BACE secretase/sheddase; neurodegenerative disorder.
 XX Mus sp.
 OS WO200210354-A2.
 XX 07-FEB-2002.
 PD 01-AUG-2001; 2001WO-CA01118.
 XX 01-AUG-2000; 2000CA-2313828.
 XX (RECL-) INST RECH CLINIQUES MONTREAL.
 PA Seidah NG, Chretien M, Cromlish JA;
 PI WPI; 2002-280632/32.
 DR

XX Modulating activity of beta-site amyloid precursor protein-cleaving
 PT enzyme secretase/sheddase for treatment of neurodegenerative disorder
 PT characterised by generation of Abeta protein, by preventing cleavage of
 PT enzyme -
 XX Disclosure: Page 28; 64pp; English.
 XX This invention relates to a novel method for modulating activity of
 CC beta-site amyloid precursor protein (APP)-cleaving enzyme (BACE)
 CC secretase/sheddase. Cleavage of BACE by this enzyme results in the
 CC generation of a soluble BACE which enhances the production of the
 CC amyloidogenic peptide Abeta which has been shown to be involved in the
 CC aetiology of Alzheimer's disease. Inhibition of BACE secretase can be
 CC achieved by administration of an antisense nucleotide molecule capable
 CC of hybridising with BACE mRNA, by using a ribozyme that targets and
 CC degrades BACE secretase mRNA, with a peptide that can interfere with
 CC binding of the enzyme with BACE or using an antibody or antagonist that
 CC can function as an inhibitor of BACE secretase activation. The methods
 CC of the invention modulate the activity of BACE secretase/sheddase by
 CC preventing cleavage of BACE, which is useful for the treatment of a
 CC neurodegenerative disorder characterised by the generation of Abeta
 CC protein, especially Alzheimer's disease. The invention also comprises a
 CC method for identification of an agent that can alter the ability of BACE
 CC secretase to associate with and process a known substrate, this method
 CC can be used for high throughput screening of candidate molecules. The
 CC invention also comprises a method for determining whether an individual
 CC is at risk of developing a neurodegenerative disorder characterised
 CC by the generation of Abeta protein by measuring the levels of BACE
 CC C terminal cleavage products in a sample or tissue where an increase
 CC in cleavage products indicates a person at risk. The present sequence
 CC represents the N terminal of a beta amyloid protein of the
 XX invention.
 XX Sequence 8 AA;
 SQ Query Match 70.0%; Score 7; DB 23; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 AEFHRDS 7
 Db 2 AEFHRDS 8
 RESULT 8
 AAB46211
 ID AAB46211 standard; peptide; 10 AA.
 XX AAB46211;
 AC 04-APR-2001 (first entry)
 DT Human APP derived immunogenic peptide #7.
 DE Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.
 XX Homo sapiens.
 OS WO200072880-A2.
 XX 07-DEC-2000.
 PD 26-MAY-2000; 2000WO-US14810.
 XX 28-MAY-1999; 99US-0322289.
 XX (NEUR-) NEURALAB LTD.
 PA Schenk DB, Bard F, Vasquez NJ, Yednock T;
 PI
 XX

DR WPI; 2001-032104/04.
XX Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
XX
XX Disclosure; Figure 19; 143pp; English.
PS
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nontropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 10 AA;
Query Match 70.0%; Score 7; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.09;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 AEFHDS 7
DB 4 AEFHDS 10
IIIIII
RESULT 9
AAB46217
ID AAB46217 standard; peptide; 10 AA.
XX
XX AAB46217;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP derived immunogenic peptide #13.
XX
XX Amyloid deposit; APP; Abeta; brain; human; clearing response; nontropic;
XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
XX amyloid precursor protein; Alzheimer's disease.
XX
XX Homo sapiens.
XX
XX WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX WPI; 2001-032104/04.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX WPI; 2001-032104/04.
XX
PD Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
XX Disclosure; Figure 19; 143pp; English.
PS
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nontropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 10 AA;
Query Match 70.0%; Score 7; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.09;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 AEFHDS 7
DB 4 AEFHDS 10
IIIIII
RESULT 10
AAB46202
ID AAB46202 standard; peptide; 7 AA.
XX
XX AAB46202;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP A-beta protein N-terminal fragment.
XX
XX Amyloid deposit; APP; Abeta; brain; human; clearing response; nontropic;
XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
XX amyloid precursor protein; Alzheimer's disease.
XX
XX Homo sapiens.
XX
XX WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX WPI; 2001-032104/04.
XX
PD Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
XX Claim 59; Page 119; 143pp; English.
PS
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nontropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 7 AA;
Query Match 70.0%; Score 7; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.09;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 RHDGVE 10
DB 1 RHDGVE 7
IIIIII
RESULT 10
AAB46202
ID AAB46202 standard; peptide; 7 AA.
XX
XX AAB46202;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP A-beta protein N-terminal fragment.
XX
XX Amyloid deposit; APP; Abeta; brain; human; clearing response; nontropic;
XX Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
XX amyloid precursor protein; Alzheimer's disease.
XX
XX Homo sapiens.
XX
XX WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX WPI; 2001-032104/04.
XX
PD Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
XX Claim 59; Page 119; 143pp; English.
PS
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have nontropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 7 AA;
Query Match 70.0%; Score 7; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.09;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4 RHDGVE 10
DB 1 RHDGVE 7
IIIIII

Query Match 60.0%; Score 6; DB 22; Length 7;
Best Local Similarity 100.0%; Pred. No. 7.8e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AEFRRD 6
| | | | |
Db 2 AEFRRD 7

RESULT 11

AAO14421
ID AAO14421 standard; Peptide; 7 AA.

XX AC AAO14421;

XX DT 02-MAY-2002 (first entry)

XX DE Synthetic peptide of A-Beta residues 1-7 (DAEFRHD).

XX KW Neurodegenerative disorder; Alzheimer's disease; AD; T714I; APP; APP714;
KW amyloid precursor protein; amyloid Beta peptide; A-Beta; A-Beta40; brain;
KW A-Beta42; plaque pathology; pre-amyloid; cerebral amyloid angiopathy;
KW Dense-core plaque; CNA; senile plaque core; amyloid cascade; murine;
KW mouse; DAEFRHD; monoclonal antibody.

XX OS Mus sp.

XX OS Synthetic.

XX PN WO200202769-A1.

XX PD 10-JAN-2002.

XX PF 06-JUL-2001; 2001WO-EP07830.

XX PR 06-JUL-2000; 2000EP-0202362.

XX PA (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOFTECHNOG.

XX PI Cruts M, De Jonghe C, Kumar Singh S, Van Broeckhoven C;

XX DR WPI; 2002-154742/20.

XX PT Novel polynucleotide sequence encoding a mutant of amyloid precursor
protein 70, useful for screening for a molecule capable of reducing the
formation of beta amyloid 42 peptide

XX PS Disclosure; Page 21; 42pp; English.

XX CC The invention relates to the field of the neurodegenerative disorder of
Alzheimer's disease (AD). In particular, the invention provides a novel
mutation (T714I) identified in the amyloid precursor protein (APP),
APP714, which leads to a very aggressive form of AD. The mutation
involves the 43rd codon of the amyloid Beta peptide (A-Beta)
corresponding to the putative gamma 42-secretase cleavage site. The
novel mutation alters both A-Beta40 and A-Beta42 secretion elevating
the A-Beta42/A-Beta40 ratio by 10-fold in vitro. Furthermore, the main
amyloid plaque pathology in brains of these patients is of the diffuse
'pre-amyloid' type composed primarily of N-truncated A-Beta42. Dense-
cored plaques although not absent, were significantly reduced. Also, the
usual sites in brain where A-Beta40 is predominantly deposited, for
instance, in vessels as cerebral amyloid angiopathy (CAA) or senile
plaque cores, were composed entirely of A-Beta42 form. Together, these
indicate that deposition of N-truncated A-Beta42 in one of the earliest
amyloid deposited in the brain, the diffuse plaques, is fully competent
of inciting AD either through the well-established 'amyloid cascade' or
by a yet unknown mechanism(s). This sequence represents a synthetic
peptide of A-Beta residues 1-7 (DAEFRHD). This sequence was used for
raising a monoclonal antibody specific for the N-terminus of A-Beta40 and
A-Beta42 by immunising mice with the synthetic peptide.

XX SQ Sequence 7 AA;

Query Match 60.0%; Score 6; DB 23; Length 7;

Best Local Similarity 100.0%; Pred. No. 7.8e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AEFRRD 6
| | | | |
Db 2 AEFRRD 7

RESULT 12

AAW70865
ID AAW70865 standard; peptide; 8 AA.

XX AC AAW70865;

XX DT 04-FEB-1999 (first entry)

XX DE Beta-amyloid peptide to create a monoclonal antibody.

XX KW Beta-amyloid precursor protein; beta-APP; beta-amyloid peptide;
KW antibody; amyloid deposit; Alzheimer's disease.

XX OS Synthetic.

XX OS Homo sapiens.

XX FN WO9844955-A1.

XX PD 15-OCT-1998.

XX PF 09-APR-1998; 98WO-US06900.

XX PR 09-APR-1997; 97US-0041850.

XX PA (MCIN/) MCINNIS P A.

XX PA (MIND-) MINDSET LTD.

XX PI Chain DG;

XX DR WPI; 1998-594476/50.

XX PT Preventing or inhibiting progression of Alzheimer's Disease -
comprises use of recombinant DNA encoding an antibody specific for
the N- or C-terminus of an amyloid-beta peptide

XX PS Example 1; Page 46; 58pp; English.

XX CC The present sequence represents a peptide derived from beta-amyloid
precursor protein (beta-APP, see AAW70865). The peptide is a
beta-amyloid peptide and is used to produce a monoclonal antibody
designated antisennin N17. The specification describes a method for
prevention or inhibition of progression of Alzheimer's disease. The
method comprises administering a composition comprising a recombinant DNA
molecule containing a gene encoding a recombinant antibody end-specific
for the N-terminus or the C-terminus of an amyloid-beta peptide, operably
linked to a promoter which is expressed in the central nervous system.
The recombinant antibody molecules prevent the accumulation of
beta-amyloid peptides in the extracellular space, interstitial fluid and
cerebrospinal fluid and the aggregation of such peptides into amyloid
deposits in the brain. They also inhibit the progression of Alzheimer's
disease by inhibiting the interaction of beta-amyloid peptides mediating
Alzheimer's disease induced neurotoxicity and inhibiting the Alzheimer's
disease induced complement activation and cytokine release involved in
the inflammatory process.

XX SQ Sequence 8 AA;

Query Match 60.0%; Score 6; DB 19; Length 8;

Best Local Similarity 100.0%; Pred. No. 7.8e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AEFRRD 6
| | | | |
Db 2 AEFRRD 7

RESULT 13
 AAB46210
 ID AAB46210 standard; peptide; 10 AA.
 XX
 AC AAB46210;
 XX
 DT 04-APR-2001 (first entry)
 XX
 DE Human APP derived immunogenic peptide #6.
 XX
 KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;
 KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200072880-A2.
 XX
 PD 07-DEC-2000.
 XX
 PF 26-MAY-2000; 2000WO-US14810.
 XX
 PR 28-MAY-1999; 99US-0322289.
 XX
 PA (NEUR-) NEURALAB LTD.
 XX
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX
 DR WPI; 2001-032104/04.
 XX
 PT Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -
 XX
 PS Disclosure; Figure 19; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have nootropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 SQ Sequence 10 AA;
 Query Match 60.0%; Score 6; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 AEFRRD 6
 DB 5 AEFRRD 10
 RESULT 14
 AAB46218
 ID AAB46218 standard; peptide; 10 AA.
 XX
 AC AAB46218;
 XX
 DT 04-APR-2001 (first entry)
 XX
 DE Human APP derived immunogenic peptide #14.
 XX
 KW Amyloid deposit; APP; Abeta; brain; human; clearing response; nootropic;

KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200072880-A2.
 XX
 PD 07-DEC-2000.
 XX
 PF 26-MAY-2000; 2000WO-US14810.
 XX
 PR 28-MAY-1999; 99US-0322289.
 XX
 PA (NEUR-) NEURALAB LTD.
 XX
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX
 DR WPI; 2001-032104/04.
 XX
 PT Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -
 XX
 PS Disclosure; Figure 19; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have nootropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 SQ Sequence 10 AA;
 Query Match 60.0%; Score 6; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 1.2;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 HDSGYE 10
 DB 1 HDSGYE 6
 RESULT 15
 ABB05182
 ID ABB05182 standard; peptide; 5 AA.
 XX
 AC ABB05182;
 XX
 DT 02-APR-2002 (first entry)
 XX
 DE Beta amyloid peptide related peptide PPI-339 SEQ ID NO:36.
 XX
 KW Beta amyloid peptide; beta-AP; beta amyloid precursor protein; A-beta;
 KW APP-770; amyloid aggregation; amyloidogenic; Alzheimer's disease;
 KW nootropic; neuroprotective; immunosuppressive; antimicrobial; auditory;
 KW antidiabetic; antipyretic; dermatological; cardiovascular; nephrotropic;
 KW amyloid aggregation inhibitor; neurotoxicity inhibitor; Down's syndrome;
 KW amyloidogenic disease; beta amyloid deposition; amyloidosis;
 KW hereditary cerebral haemorrhage; familial amyloid polyneuropathy.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN US6319498-B1.
 XX

PD 20-NOV-2001.
XX
PF 14-MAR-1996; 96US-0617267.
XX
PR 14-MAR-1995; 95US-0404831.
PR 07-JUN-1995; 95US-0475579.
XX 27-OCT-1995; 95US-0548998.
XX
PA (PRAE-) PRACIS PHARM INC.
XX
PI Findels MA, Benjamin H, Carnick MB, Gefter ML, Hundal A, Kasman L;
PI Musso G, Signer ER, Wakefield J, Reed MJ;
XX
DR WPI; 2002-146668/19.
XX
XX Amyloid modulator compound useful for treatment of an amyloidogenic
PT disease such as Alzheimer's disease comprises an aggregation core
PT domain and a modifying group attached to it -
XX
PS Example 11; Column 63; 54pp; English.
XX
CC The present invention describes an amyloid modulator compound (I)
CC comprising an aggregation core domain and a modifying group attached to
CC it. (I) has neurotropic, neuroprotective, immunosuppressive, antimicrobial,
CC antidiabetic, antipyretic, dermatological, cardiovascular, nephrotropic
CC and auditory activities, and can be used as a natural amyloid aggregation
CC inhibitor and a neurotoxicity inhibitor of natural beta amyloid peptide
CC (beta-AP). (I) are used in the manufacture of a medicament for the
CC diagnosis or treatment of an amyloidogenic disease e.g. Alzheimer's
CC disease and other clinical occurrences of beta amyloid deposition such as
CC Down's syndrome individuals and in patients with hereditary cerebral
CC haemorrhage with amyloidosis, and for treating a disorder associated with
CC amyloidosis such as familial amyloid polynuropathy. (I) reduces the
CC toxicity of natural beta-AP aggregates to cultured neuronal cells (I)
CC not only reduces the formation of neurotoxic aggregates but also have the
CC ability to reduce the neurotoxicity of performed A-beta fibrils. The
CC present sequence represents a peptide which is used in the
CC exemplification of the present invention.
XX
XX Sequence 5 AA;
XX
Query Match 50.0%; Score 5; DB 23; Length 5;
Best Local Similarity 100.0%; Pred. No. 7.8e-05;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 1 HDSGY 5
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Gapop 60.0 , Gapext 60.0

Searched: 908470 seqs, 133250620 residues

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Maximum DB seq length: 10

Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	10	100.0	10	15	AAR58928	Human amyloid prec
2	10	100.0	10	22	AAB46213	Human APP derived
3	9	90.0	10	22	AAB46212	Human APP derived
4	9	90.0	10	22	AAB46214	Human APP derived
5	8	80.0	8	23	AAU78518	N terminus of beta
6	8	80.0	10	22	AAB46211	Human APP derived
7	8	80.0	10	22	AAB46215	Human APP derived
8	7	70.0	7	22	AAB46202	Human APP A-beta p
9	7	70.0	7	23	AAO14421	Synthetic peptide
10	7	70.0	8	19	AAW70865	Betaamyloid pepti

11	7	70.0	10	22	AAB46210	Human APP derived
12	7	70.0	10	22	AAB46216	Human APP derived
13	6	60.0	6	19	AAW70868	Beta-amyloid pept1
14	6	60.0	10	22	AAB46209	Human APP derived
15	6	60.0	10	22	AAB46217	Human APP derived
16	5	50.0	5	21	AAV69702	Beta-APP alpha-sec
17	5	50.0	5	22	AAE10667	Human APP-Sw mutant
18	5	50.0	5	22	AAE06907	Human Asp-2 beta-s
19	5	50.0	5	22	AAU06636	Peptide product of
20	5	50.0	5	22	AAU07235	Human beta-amyloid
21	5	50.0	5	23	ABB05182	Beta-amyloid pept1
22	5	50.0	6	19	AAW70864	Beta-amyloid pept1
23	5	50.0	6	22	AAB46199	Human APP A-beta 1
24	5	50.0	6	22	AAB46195	Human amyloid beta
25	5	50.0	8	18	AAW19494	Immunogen for rais
26	5	50.0	8	18	AAW19507	Immunogen for rais
27	5	50.0	9	23	ABB06519	Beta-secretase rel
28	5	50.0	10	13	AAK24262	Human amyloidin pr
29	5	50.0	10	13	AAK24260	Human amyloidin pr
30	5	50.0	10	13	AAK24261	Human amyloidin pr
31	5	50.0	10	13	AAK24263	Human amyloidin pr
32	5	50.0	10	13	AAK24267	Human amyloidin pr
33	5	50.0	10	18	AAW08362	Beta-secretase sub
34	5	50.0	10	20	AAV33756	Synthetic oligopep
35	5	50.0	10	21	AAV96712	Doubly phosphoryla
36	5	50.0	10	21	AAV96719	p-i-kappa-B-alpha
37	5	50.0	10	21	AAV69703	Beta-APP alpha-sec
38	5	50.0	10	21	AAV69704	Beta-APP alpha-sec
39	5	50.0	10	21	AAV69705	Beta-APP alpha-sec
40	5	50.0	10	21	AAV69706	Beta-APP alpha-sec
41	5	50.0	10	21	AAV69707	Beta-APP alpha-sec
42	5	50.0	10	21	AAV69708	Beta-APP alpha-sec
43	5	50.0	10	21	AAV69709	Beta-APP alpha-sec
44	5	50.0	10	21	AAV69710	Beta-APP alpha-sec
45	5	50.0	10	22	AAE10653	Human APP-Sw beta-

ALIGNMENTS

RESULT 1	
AAK58928	
ID	AAK58928 standard; peptide; 10 AA.
XX	
AC	AAK58928;
XX	
DT	15-APR-1995 (first entry)
XX	
DE	Human amyloid precursor protein APP695 residues 597-606.
XX	
KW	Amyloid precursor protein; isoform APP 695; beta amyloid; Alzheimer's disease.
KN	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being predicted and is derived by analysis of the total score distribution.

XX PS Disclosure; Page 33; 7lpp; English.

CC Beta amyloid is synthesised as part of a larger protein referred to

CC as amyloid precursor protein (APP), which has a number of isoforms

CC in humans, including APP695 and APP770. The amino terminal of beta

CC amyloid is generated by cleavage of a peptide bond of APP which in

CC APP695 lies between Met596 and Asp597. APP forms a complex with Go,

CC a GTP-binding protein (or "G protein") in brain. Go is made of one

CC alpha subunit and one beta-gamma subunit. Two isoforms of Go, known

CC as Go1 (or GoA) and Go2 (or GoB) have been identified; they have

CC slight AA differences in their alpha subunits. The cDNA sequence and

CC deduced AA sequence of the alpha subunits in each of Go1 and Go2 are

CC shown in AAQ69002/R58914 and AAQ69004/R58924 respectively. The

CC cytoplasmic APP695 sequence His657-Lys676 (AAR58913) possesses a

CC specific Go-activating function, and is necessary for complex

CC formation of this APP with Go. AAR58928 is another peptide of

CC APP695 which corresp. to AAS 597-606.

XX SQ Sequence 10 AA;

Query Match 100.0%; Score 10; DB 15; Length 10;

Best Local Similarity 100.0%; Pred. No. 3.5e-05;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGY 10

DB 1 DAEFRHDSGY 10

RESULT 2

AAAB46213

ID AAB46213 standard; peptide; 10 AA.

XX AC AAB46213;

XX DT 04-APR-2001 (first entry)

XX DE Human APP derived immunogenic peptide #9.

XX KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;

XX KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;

XX KW amyloid precursor protein; Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO200072880-A2.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US14810.

XX PR 28-MAY-1999; 99US-0322289.

XX PA (NEUR-) NEURALAB LTD.

XX PI Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX DR WPI; 2001-032104/04.

XX PT Preventing or treating a disease associated with amyloid deposits,

XX PT especially Alzheimer's disease, comprises administering amyloid

XX PT specific antibody -

XX PS Disclosure; Figure 19; 143pp; English.

XX CC This invention describes a novel method of preventing or treating a

XX CC disease associated with amyloid deposits of amyloid precursor protein

XX CC (APP) Abeta fragments in the brain of a patient, which comprises

XX CC administering to the patient: (a) an antibody that binds to Abeta, the

XX CC antibody binds to an amyloid deposit and induces a clearing response (Fc

XX CC receptor mediated phagocytosis) against it (b) a polypeptide containing

XX CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX CC that induces an immunogenic response against residues 1-3 to 7-11 of

XX CC Abeta. The products of the invention have neurotropic and neuroprotective

XX CC activity. The method is also useful for monitoring a course of treatment

XX CC being administered to a patient e.g. active and passive immunization. The

XX CC methods are useful for prophylactic and therapeutic treatment of

XX CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 100.0%; Score 9; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00048;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC that induces an immunogenic response against residues 1-3 to 7-11 of

CC Abeta. The products of the invention have neurotropic and neuroprotective

CC activity. The method is also useful for monitoring a course of treatment

CC being administered to a patient e.g. active and passive immunization. The

CC methods are useful for prophylactic and therapeutic treatment of

CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 100.0%; Score 10; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 3.5e-05;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSGY 10

DB 1 DAEFRHDSGY 10

RESULT 3

AAAB46212

ID AAB46212 standard; peptide; 10 AA.

XX AC AAB46212;

XX DT 04-APR-2001 (first entry)

XX DE Human APP derived immunogenic peptide #8.

XX KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;

XX KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;

XX KW amyloid precursor protein; Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO200072880-A2.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US14810.

XX PR 28-MAY-1999; 99US-0322289.

XX PA (NEUR-) NEURALAB LTD.

XX PI Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX DR WPI; 2001-032104/04.

XX PT Preventing or treating a disease associated with amyloid deposits,

XX PT especially Alzheimer's disease, comprises administering amyloid

XX PT specific antibody -

XX PS Disclosure; Figure 19; 143pp; English.

XX CC This invention describes a novel method of preventing or treating a

XX CC disease associated with amyloid deposits of amyloid precursor protein

XX CC (APP) Abeta fragments in the brain of a patient, which comprises

XX CC administering to the patient: (a) an antibody that binds to Abeta, the

XX CC antibody binds to an amyloid deposit and induces a clearing response (Fc

XX CC receptor mediated phagocytosis) against it (b) a polypeptide containing

XX CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent

XX CC that induces an immunogenic response against residues 1-3 to 7-11 of

XX CC Abeta. The products of the invention have neurotropic and neuroprotective

XX CC activity. The method is also useful for monitoring a course of treatment

XX CC being administered to a patient e.g. active and passive immunization. The

XX CC methods are useful for prophylactic and therapeutic treatment of

XX CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 90.0%; Score 9; DB 22; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.00048;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAEFRHDSG 9
 |||||
 Db 2 DAEFRHDSG 10
 |||||
 RESULT 4
 AAB46214
 ID AAB46214 standard; peptide; 10 AA.
 XX
 AC AAB46214;
 XX
 DT 04-APR-2001 (first entry)
 XX
 DE Human APP derived immunogenic peptide #10.
 XX
 KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 KW FC receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200072880-A2.
 XX
 PD 07-DEC-2000.
 XX
 PF 26-MAY-2000; 2000WO-US14810.
 XX
 PR 28-MAY-1999; 99US-0322289.
 XX
 PA (NEUR-) NEURALAB LTD.
 XX
 PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
 XX
 DR WPI: 2001-032104/04.
 XX
 PT Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody.
 XX
 PS Disclosure: Figure 19; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (FC
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have neurotropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 SQ Sequence 10 AA;
 Query Match 90.0%; Score 9; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.00049;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2 AEFRHDSGY 10
 |||||
 Db 1 AEFRHDSGY 9
 |||||
 RESULT 5
 AAU78518
 ID AAU78518 standard; Peptide; 8 AA.
 XX
 AC AAU78518;
 XX

DT 18-JUN-2002 (first entry)
 XX
 DE N terminus of beta amyloid.
 XX
 KW Alzheimer's disease; beta amyloid precursor protein; mouse;
 KW BACE; beta-site APP cleaving enzyme; neurotropic; neuroprotective;
 KW beta-site amyloid precursor protein (APP)-cleaving enzyme; APP;
 KW BACE secretase/shedase; neurodegenerative disorder.
 XX
 OS Mus sp.
 XX
 PN WO200210354-A2.
 XX
 PD 07-FEB-2002.
 XX
 PF 01-AUG-2001; 2001WO-CA011118.
 XX
 PR 01-AUG-2000; 2000CA-2313828.
 XX
 PA (RECL-) INST RECH CLINIQUES MONTREAL.
 XX
 PI Seidah NG, Chretien M, Cromlish JA;
 XX
 DR WPI: 2002-280632/32.
 XX
 PT Modulating activity of beta-site amyloid precursor protein-cleaving
 PT enzyme secretase/shedase for treatment of neurodegenerative disorder
 PT characterised by generation of Abeta protein, by preventing cleavage of
 PT enzyme.
 XX
 PS Disclosure: Page 28; 64pp; English.
 XX
 CC This invention relates to a novel method for modulating activity of
 CC beta-site amyloid precursor protein (APP)-cleaving enzyme (BACE)
 CC secretase/shedase. Cleavage of BACE by this enzyme results in the
 CC generation of a soluble BACE which enhances the production of the
 CC amyloidogenic peptide Abeta which has been shown to be involved in the
 CC aetiology of Alzheimer's disease. Inhibition of BACE secretase can be
 CC achieved by administration of an antisense nucleotide molecule capable
 CC of hybridising with BACE mRNA, by using a ribozyme that targets and
 CC degrades BACE secretase mRNA, with a peptide that can interfere with
 CC binding of the enzyme with BACE or using an antibody or antagonist that
 CC can function as an inhibitor of BACE secretase activation. The methods
 CC of the invention modulate the activity of BACE secretase/shedase by
 CC preventing cleavage of BACE, which is useful for the treatment of a
 CC neurodegenerative disorder characterised by the generation of Abeta
 CC protein, especially Alzheimer's disease. The invention also comprises a
 CC method for identification of an agent that can alter the ability of BACE
 CC secretase to associate with and process a known substrate, this method
 CC can be used for high throughput screening of candidate molecules. The
 CC invention also comprises a method for determining whether an individual
 CC is at risk of developing a neurodegenerative disorder characterised
 CC by the generation of Abeta protein by measuring the levels of BACE
 CC C terminal cleavage products in a sample or tissue where an increase
 CC in cleavage products indicates a person at risk. The present sequence
 CC represents the N terminal of a beta amyloid protein of the
 CC invention.
 XX
 SQ Sequence 8 AA;
 Query Match 80.0%; Score 8; DB 23; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHDS 8
 |||||
 Db 1 DAEFRHDS 8
 |||||
 RESULT 6
 AAB46211
 ID AAB46211 standard; peptide; 10 AA.
 XX

DR WPI; 2001-032104/04.
 XX Preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -
 XX
 XX
 PS Claim 59; Page 119; 143pp; English.
 XX
 CC This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) beta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to beta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of beta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC beta. The products of the invention have neurotropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of
 CC Alzheimer's disease.
 XX
 SQ Sequence 7 AA:
 Query Match 70.0%; Score 7; DB 22; Length 7;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHD 7
 Db 1 DAEFRHD 7
 |||||
 1 DAEFRHD 7
 RESULT 9
 AAO14421
 ID AAO14421 standard; Peptide; 7 AA.
 XX
 AC AAO14421;
 XX
 DT 02-MAY-2002 (first entry)
 XX
 DE Synthetic peptide of A-Beta residues 1-7 (DAEFRHD).
 XX
 KW Neurodegenerative disorder; Alzheimer's disease; AD; T7141; APP; APP714;
 KW amyloid precursor protein; amyloid beta peptide; A-Beta; A-Beta40; brain;
 KW A-Beta42; plaque pathology; pre-amyloid; cerebral amyloid angiopathy;
 KW dense-cored plaque; CAA; senile plaque core; amyloid cascade; murine;
 KW mouse; DAEFRHD; monoclonal antibody.
 XX
 OS Mus sp.
 OS Synthetic.
 XX
 PN WO200202769-A1.
 XX
 PD 10-JAN-2002.
 XX
 PF 06-JUL-2001; 2001WO-EP07830.
 XX
 PR 06-JUL-2000; 2000EP-0202362.
 XX
 PA (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
 XX
 PI Cruts M, De Jonghe C, Kumar Singh S, Van Broeckhoven C;
 XX
 DR WPI; 2002-154742/20.
 XX
 PT Novel polynucleotide sequence encoding a mutant of amyloid precursor
 PT protein 70, useful for screening for a molecule capable of reducing the
 PT formation of beta amyloid 42 peptide -
 XX
 PS Disclosure; Page 21; 42pp; English.
 XX
 CC The invention relates to the field of the neurodegenerative disorder of

CC Alzheimer's disease (AD). In particular, the invention provides a novel
 CC mutation (T7141) identified in the amyloid precursor protein (APP),
 CC APP714, which leads to a very aggressive form of AD. The mutation
 CC involves the 43rd codon of the amyloid beta peptide (A-Beta)
 CC corresponding to the putative gamma 42-secretase cleavage site. The
 CC novel mutation alters both A-Beta40 and A-Beta42 secretion elevating
 CC the A-Beta42/A-Beta40 ratio by 10-fold in vitro. Furthermore, the main
 CC amyloid plaque pathology in brains of these patients is of the diffuse
 CC 'pre-amyloid' type composed primarily of N-truncated A-Beta42. Dense-
 CC cored plaques although not absent, were significantly reduced. Also, the
 CC usual sites in brain where A-Beta40 is predominantly deposited, for
 CC instance in vessels as cerebral amyloid angiopathy (CAA) or senile
 CC plaques cores, were composed entirely of A-Beta42 form. Together these
 CC indicate that deposition of N-truncated A-Beta42 in one of the earliest
 CC amyloid deposited in the brain, the diffuse plaques, is fully competent
 CC of inciting AD either through the well-established 'amyloid cascade' or
 CC by a yet unknown mechanism(s). This sequence represents a synthetic
 CC peptide of A-Beta, residues 1-7 (DAEFRHD). This sequence was used for
 CC raising a monoclonal antibody specific for the N-terminus of A-Beta40 and
 CC A-Beta42 by immunising mice with the synthetic peptide.
 XX
 SQ Sequence 7 AA:
 Query Match 70.0%; Score 7; DB 23; Length 7;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DAEFRHD 7
 Db 1 DAEFRHD 7
 |||||
 1 DAEFRHD 7
 RESULT 10
 AAW70865
 ID AAW70865 standard; peptide; 8 AA.
 XX
 AC AAW70865;
 XX
 DT 04-FEB-1999 (first entry)
 XX
 DE Beta-amyloid peptide to create a monoclonal antibody.
 XX
 KW Beta-amyloid precursor protein; beta-APP; beta-amyloid peptide;
 KW antibody; amyloid deposit; Alzheimer's disease.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9844955-A1.
 XX
 PD 15-OCT-1998.
 XX
 PF 09-APR-1998; 98WO-US06900.
 XX
 PR 09-APR-1997; 97US-0041850.
 XX
 PA (MCIN/) MCINNIS P A.
 PA (MIND-) MINDSET LTD.
 XX
 PI chain DG;
 XX
 DR WPI; 1998-594476/50.
 XX
 PT Preventing or inhibiting progression of Alzheimer's Disease -
 PT comprises use of recombinant DNA encoding an antibody specific for
 PT the N- or C-terminus of an amyloid-beta peptide
 XX
 PS Example 1; Page 46; 58pp; English.
 XX
 CC The present sequence represents a peptide derived from beta-amyloid
 CC precursor protein (beta-APP, see AAW70863). The peptide is a
 CC beta-amyloid peptide and is used to produce a monoclonal antibody
 CC designated antisennilin N1/7. The specification describes a method for

CC prevention or inhibition of progression of Alzheimer's disease. The
 CC method comprises administering a composition comprising a recombinant DNA
 CC molecule containing a gene encoding a recombinant antibody end-specific
 CC for the N-terminus or the C-terminus of an amyloid-beta peptide, operably
 CC linked to a promoter which is expressed in the central nervous system.
 CC The recombinant antibody molecules prevent the accumulation of
 CC beta-amyloid peptides in the extracellular space, interstitial fluid and
 CC cerebrospinal fluid and the aggregation of such peptides into amyloid
 CC deposits in the brain. They also inhibit the progression of Alzheimer's
 CC disease by inhibiting the interaction of beta-amyloid peptides mediating
 CC Alzheimer's disease induced neurotoxicity and inhibiting the Alzheimer's
 CC disease induced complement activation and cytokine release involved in
 CC the inflammatory process.

XX SQ Sequence 8 AA;

Query Match 70.0%; Score 7; DB 19; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.8e+05;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAERHD 7
 |||||

DB 1 DAERHD 7

RESULT 11

AAB46210
 ID AAB46210 standard; peptide: 10 AA.

XX AC AAB46210;

XX DT 04-APR-2001 (first entry)

XX DE Human APP derived immunogenic peptide #6.

XX KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO200072880-A2.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US14810.

XX PR 28-MAY-1999; 99US-0322289.

XX PA (NEUR-) NEURALAB LTD.

XX PI Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX WPI; 2001-032104/04.

XX PT preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -

XX PS Disclosure; Figure 19; 143pp; English.

XX This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have neurotropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of

CC Alzheimer's disease.

XX SQ Sequence 10 AA;

Query Match 70.0%; Score 7; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.091;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DAERHD 7

DB 4 DAERHD 10

RESULT 12

AAB46216

ID AAB46216 standard; peptide: 10 AA.

XX AC AAB46216;

XX DT 04-APR-2001 (first entry)

XX DE Human APP derived immunogenic peptide #12.

XX KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
 KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
 KW amyloid precursor protein; Alzheimer's disease.

XX OS Homo sapiens.

XX PN WO200072880-A2.

XX PD 07-DEC-2000.

XX PF 26-MAY-2000; 2000WO-US14810.

XX PR 28-MAY-1999; 99US-0322289.

XX PA (NEUR-) NEURALAB LTD.

XX PI Schenk DB, Bard F, Vasquez NJ, Yednock T;

XX WPI; 2001-032104/04.

XX PT preventing or treating a disease associated with amyloid deposits,
 PT especially Alzheimer's disease, comprises administering amyloid
 PT specific antibody -

XX PS Disclosure; Figure 19; 143pp; English.

XX This invention describes a novel method of preventing or treating a
 CC disease associated with amyloid deposits of amyloid precursor protein
 CC (APP) Abeta fragments in the brain of a patient, which comprises
 CC administering to the patient: (a) an antibody that binds to Abeta, the
 CC antibody binds to an amyloid deposit and induces a clearing response (Fc
 CC receptor mediated phagocytosis) against it (b) a polypeptide containing
 CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
 CC that induces an immunogenic response against residues 1-3 to 7-11 of
 CC Abeta. The products of the invention have neurotropic and neuroprotective
 CC activity. The method is also useful for monitoring a course of treatment
 CC being administered to a patient e.g. active and passive immunization. The
 CC methods are useful for prophylactic and therapeutic treatment of

XX SQ Sequence 10 AA;

Query Match 70.0%; Score 7; DB 22; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.091;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 FRHDSGY 10

DB 1 FRHDSGY 7

```

RESULT 13
AAW70868
ID AAW70868 standard; peptide; 6 AA.
XX
AC AAW70868;
XX
DT 04-FEB-1999 (first entry)
XX
DE Beta-amyloid peptide to create a monoclonal antibody.
XX
KW Beta-amyloid precursor protein; beta-APP; beta-amyloid peptide;
KW antibody; amyloid deposit; Alzheimer's disease.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9844955-A1.
XX
PD 15-OCT-1998.
XX
PF 09-APR-1998; 98WO-US06900.
XX
PR 09-APR-1997; 97US-0041850.
XX
PA (MCIN/) MCINNIS P A.
PA (MIND-) MINDSET LTD.
XX
PI Chain DG;
XX
DR WPI; 1998-594476/50.
XX
PT Preventing or inhibiting progression of Alzheimer's Disease -
PT comprises use of recombinant DNA encoding an antibody specific for
PT the N- or C-terminus of an amyloid-beta peptide
XX
PS Example 1; Page 47; 58pp; English.
XX
CC The present sequence represents a peptide derived from beta-amyloid
CC precursor protein (beta-APP, see AAW70863). The peptide is a
CC beta-amyloid peptide and is used to produce a monoclonal antibody. The
CC specification describes a method for prevention or inhibition of
CC progression of Alzheimer's disease. The method comprises administering a
CC composition comprising a recombinant DNA molecule containing a gene
CC encoding a recombinant antibody end-specific for the N-terminus or the
CC C-terminus of an amyloid-beta peptide, operably linked to a promoter
CC which is expressed in the central nervous system. The recombinant
CC antibody molecules prevent the accumulation of beta-amyloid peptides in
CC the extracellular space, interstitial fluid and cerebrospinal fluid and
CC the aggregation of such peptides into amyloid deposits in the brain.
CC They also inhibit the progression of Alzheimer's disease by inhibiting
CC the interaction of beta-amyloid peptides mediating Alzheimer's disease
CC induced neurotoxicity and inhibiting the Alzheimer's disease induced
CC complement activation and cytokine release involved in the inflammatory
CC process.
XX
SQ Sequence 6 AA;
Query Match 60.0%; Score 6; DB 19; Length 6;
Best Local Similarity 100.0%; Pred. No. 7.8e+05;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DAEFRH 6
Db 1 DAEFRH 6
IIIIII
RESULT 14
AAB46209
ID AAB46209 standard; peptide; 10 AA.
XX
AC AAB46209;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP derived immunogenic peptide #13.
XX
KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX
PN WO200072880-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
PR 28-MAY-1999; 99US-0322289.
XX
PA (NEUR-) NEURALAB LTD.
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
DR WPI; 2001-032104/04.
XX
PT Preventing or treating a disease associated with amyloid deposits,
PT especially Alzheimer's disease, comprises administering amyloid
PT specific antibody -
XX
PS Disclosure; Figure 19; 143pp; English.
XX
CC This invention describes a novel method of preventing or treating a
CC disease associated with amyloid deposits of amyloid precursor protein
CC (APP) Abeta fragments in the brain of a patient, which comprises
CC administering to the patient: (a) an antibody that binds to Abeta, the
CC antibody binds to an amyloid deposit and induces a clearing response (Fc
CC receptor mediated phagocytosis) against it (b) a polypeptide containing
CC an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
CC that induces an immunogenic response against residues 1-3 to 7-11 of
CC Abeta. The products of the invention have neurotropic and neuroprotective
CC activity. The method is also useful for monitoring a course of treatment
CC being administered to a patient e.g. active and passive immunization. The
CC methods are useful for prophylactic and therapeutic treatment of
CC Alzheimer's disease.
XX
SQ Sequence 10 AA;
Query Match 60.0%; Score 6; DB 22; Length 10;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 DAEFRH 6
Db 5 DAEFRH 10
IIIIII
RESULT 15
AAB46217
ID AAB46217 standard; peptide; 10 AA.
XX
AC AAB46217;
XX
DT 04-APR-2001 (first entry)
XX
DE Human APP derived immunogenic peptide #13.
XX
KW Amyloid deposit; APP; Abeta; brain; human; clearing response; neurotropic;
KW Fc receptor mediated phagocytosis; immunogenic response; neuroprotective;
KW amyloid precursor protein; Alzheimer's disease.
XX
OS Homo sapiens.
XX
PN WO200072880-A2.
XX

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PD 07-DEC-2000.
XX
XX
PF 26-MAY-2000; 2000WO-US14810.
XX
XX
PR 28-MAY-1999; 99US-0322289.
XX
XX
PA (NEUR-) NEURALAB LTD.
XX
XX
PI Schenk DB, Bard F, Vasquez NJ, Yednock T;
XX
XX
DR WPI; 2001-032104/04.
XX
XX
PT Preventing or treating a disease associated with amyloid deposits,
XX especially Alzheimer's disease, comprises administering amyloid
XX specific antibody -
XX
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PS Disclosure; Figure 19; 143pp; English.
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CC This invention describes a novel method of preventing or treating a
XX disease associated with amyloid deposits of amyloid precursor protein
XX (APP) Abeta fragments in the brain of a patient, which comprises
XX administering to the patient: (a) an antibody that binds to Abeta, the
XX antibody binds to an amyloid deposit and induces a clearing response (Fc
XX receptor mediated phagocytosis) against it (b) a polypeptide containing
XX an N-terminal segment of at least residues 1-5 of Abeta; or (c) an agent
XX that induces an immunogenic response against residues 1-3 to 7-11 of
XX Abeta. The products of the invention have neurotropic and neuroprotective
XX activity. The method is also useful for monitoring a course of treatment
XX being administered to a patient e.g. active and passive immunization. The
XX methods are useful for prophylactic and therapeutic treatment of
XX Alzheimer's disease.
XX
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